Getting the RR Story Over to Employees

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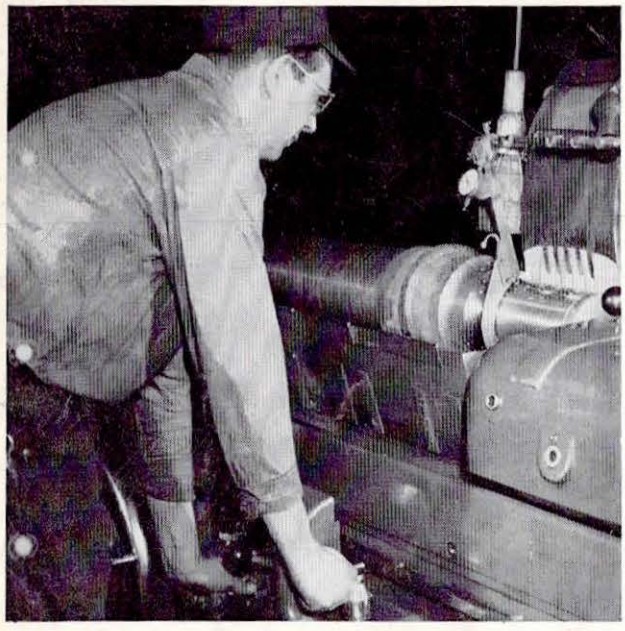
March 23, 1959

# RAILWAY AGE *weekly*



## Bethlehem Opens New Axle Line

Growing demand for freight roller bearings is cited

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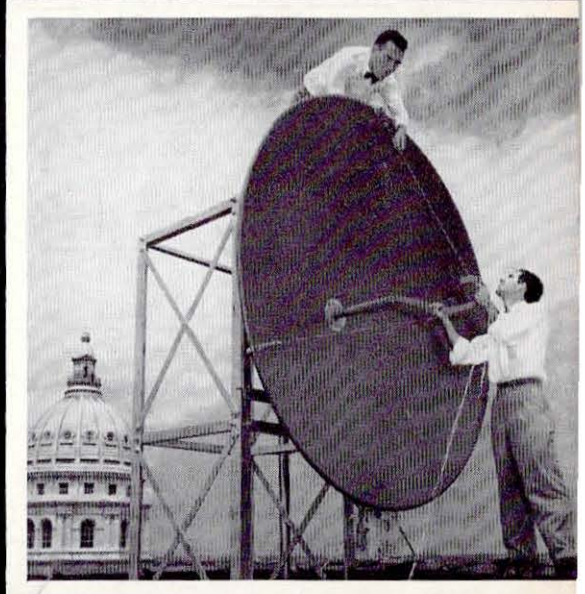
## Santa Fe Adds More Microwave

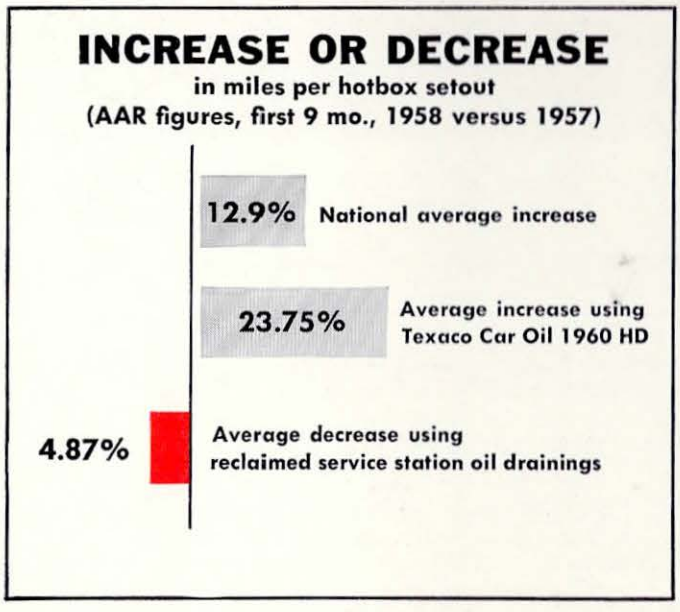
Newest link in 62 miles; fourth segment under way

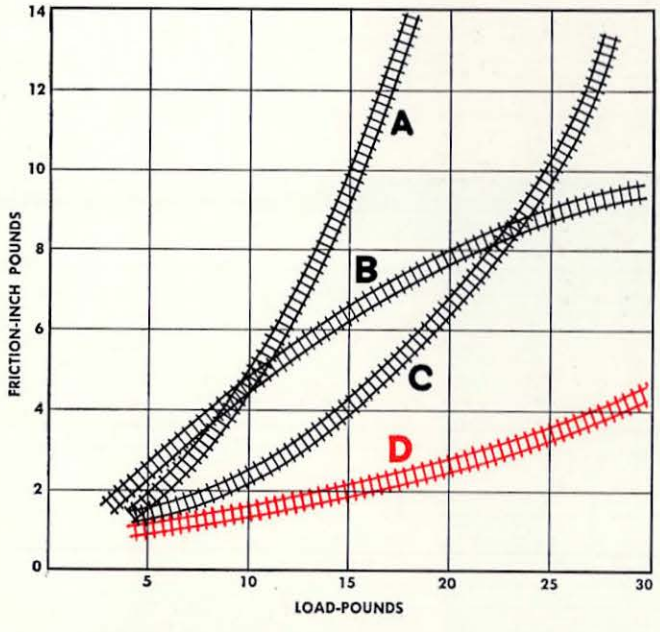


60 cents A Simmons-Boardman TIME-SAVER Publication

# Reclaimed service station oil drainings are FALSE ECONOMY in journal-bearing lubrication

*• AAR figures show Texaco premium car oil definitely increases mileage between hotbox setouts*


INCREASE OR DECREASE
in miles per hotbox setout
(AAR figures, first 9 mo., 1958 versus 1957)
12.9%
National average increase
23.75%
Average increase using Texaco Car Oil 1960 HD
4.87%
Average decrease using reclaimed service station oil drainings




There's less friction throughout the load range with Texaco Car Oil 1960 HD (curve D) than with AAR Car Oil (A) or either of two competitive premium car oils (B and C).

AAR figures for the first nine months of 1958 against the first nine months of 1957 show there's no economy in lubricating journal bearings with reclaimed service station oil drainings. Despite a national average *increase* of 12.9% miles per hotbox setout, seven prominent U. S. railroads using reclaimed service station oil drainings 100% for journal-bearing lubrication got a *decrease* of 4.87% miles per setout. Five prominent U. S. railroads using Texaco Car Oil 1960 HD 100% got an average *increase* of 23.75% miles per setout—almost twice the national average.

**What it can cost**—Each hotbox costs about $200, minimum—a lot more where perishable cargo is involved or if a pile-up is caused by derailment. When the apparent savings in the initial cost of reclaimed service station oil drainings are compared with what it costs in extra delays and costly repairs, the savings disappear and there's a big hole in profits.

**Two kinds of proof**—Actual in-service use proves the economy of lubricating journal bearings with Texaco Car Oil 1960 HD, and there's plenty of scientific evidence to show you why this new Texaco car oil can effectively reduce your hotbox rate.

**Get all the facts**—Ask your Texaco Railway Lubrication Engineer for a complete report on Texaco Car Oil 1960 HD—and let him show you what it can do for your operation. Or, write:

☆ ☆ ☆

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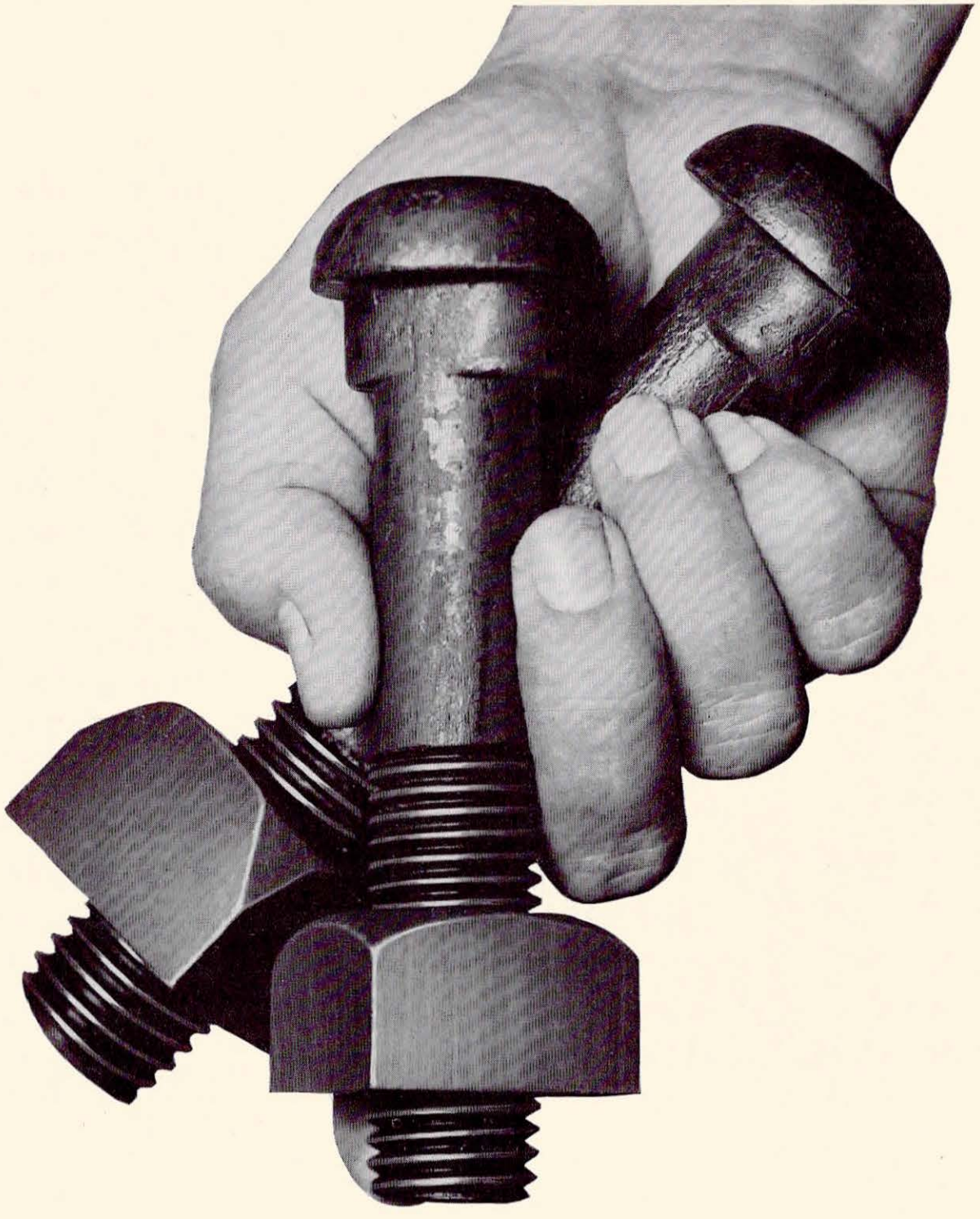

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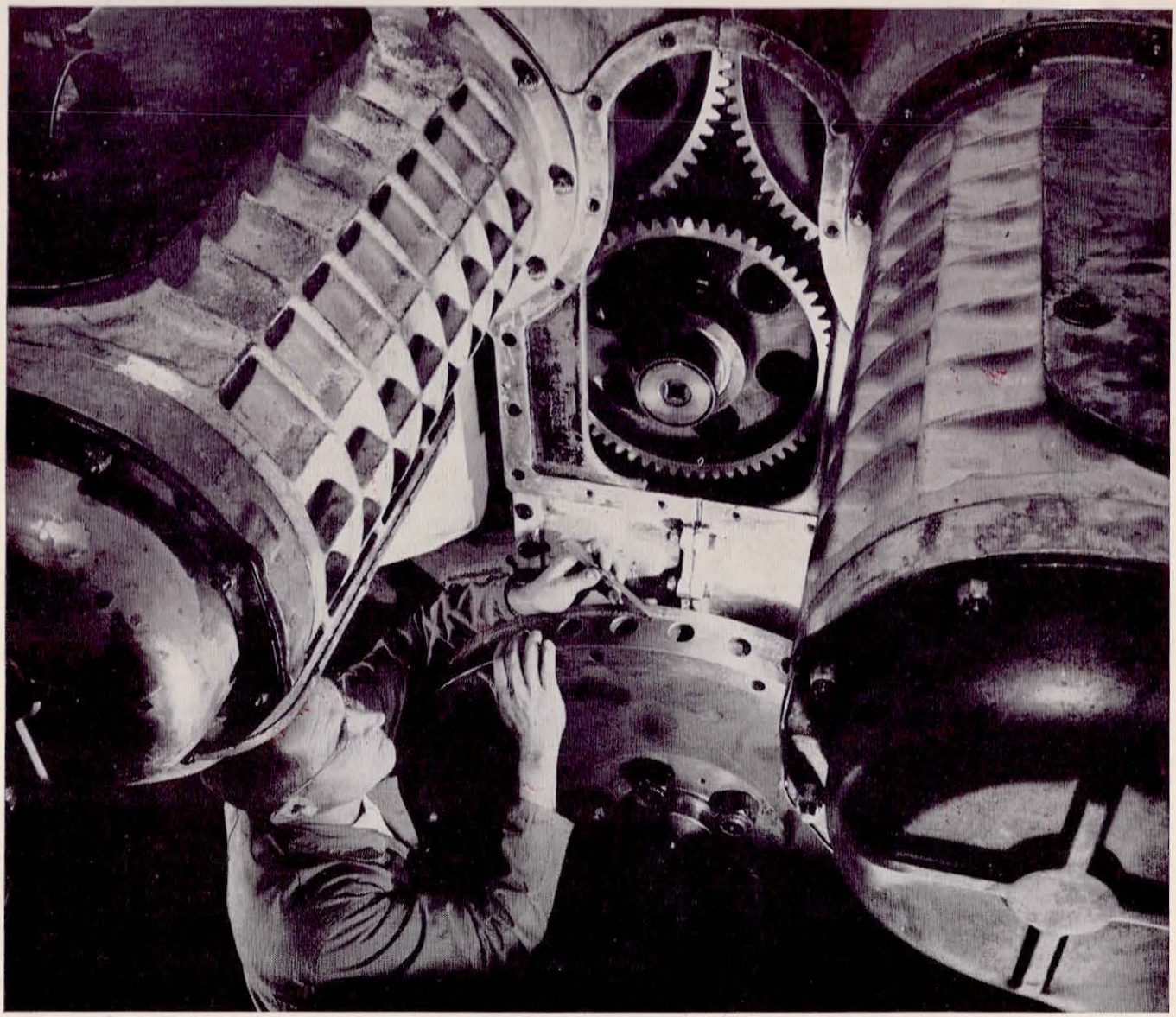
# ENGINEER'S FIELD REPORT

PRODUCT RPM DELO OIL RR

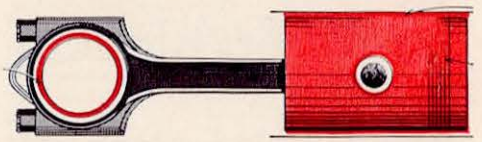
FIRM NORTHERN PACIFIC RAILWAY
South Tacoma, Wash.



## RR diesel gears show only ½° wear in 2½ million miles

Timing gears on this Northern Pacific GMC-diesel locomotive engine, lubricated with RPM DELO Oil RR, recently completed 2½ million miles of severe freight service without repairs or adjustment. NP's South Tacoma Shop Foreman, A. R. Genin (above), indicates degree marks on engine flywheel, used to gauge gear wear. Tolerance between gear teeth shows variance of just ½° from original setting. Mr. Genin says, "We consider this low rate of wear remarkable for heavy-duty freight operation. It is typical of our experience during the 12 years we have used RPM DELO Oil in all our locomotive diesels." Engines are 1350 h.p. 16-567 series.

### Why RPM DELO Oil RR reduces wear, corrosion



• Oil stays on engine parts—hot or cold, running or idle • Anti-oxidant resists lacquer formation • Detergent keeps parts clean • Special compounds prevent corrosion of bearing metals • Inhibitor resists foaming.

LUBRICATING OILS RPM DELO

TRADEMARK "RPM DELO" AND DESIGN REG. U. S. PAT. OFF

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**THE CALIFORNIA OIL COMPANY,** Perth Amboy, New Jersey

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RAILWAY AGE *weekly* March 23, 1959 • Vol. 146, No. 12

# Week at a Glance

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Railway Age, established in 1856, is indexed by the Industrial Arts Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.

Published weekly by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange, Conn. Second-class postage paid at the Post Office at Orange, Conn. James G. Lyne, chairman of the board; Arthur J. McGinnis, president and treasurer; Duane C. Salisbury, executive vice-president; F. A. Clark, vice-president and secretary; George Dusenbury, vice-president and editorial and promotion director; Robert G. Lewis, Joe W. Kizzia, M. H. Dick, M. J. Figa, R. C. Van Ness, vice-presidents.



**N.Y. plan proposes rail relief** ..... p. 9

Railroaders hail Rockefeller committee recommendations for helping commuter roads. Plan offers relief in three areas: taxes, equipment-financing, full-crew requirements.

**Cover Story—Getting the RR story to employees** ..... p.12

Railway labor's high command gets its point of view across to the rank-and-file. Railway management, by and large, doesn't seem to do as well. But the belief that management should, and could, is constantly gaining ground.

**Cover Story—Bethlehem speeds axle making** ..... p.15

The demand for roller-bearing axles for freight cars has increased sharply. To meet it, Bethlehem Steel has set up a new production line at its Johnstown, Pa., plant.

**Cover Story—Santa Fe adds more microwave** ..... p.16

Maintenance costs are expected to be less than for line wires and pole lines of equal circuit capacity.

**ORT loses 'job freeze' round** ..... p.24

Appeals court says union wants to assume management's prerogatives without its responsibilities, issues injunction against strike on job stabilization issue. Next step: an appeal to the U. S. Supreme Court.

**'Control Authority' proposed** ..... p.27

BAR President Robertson suggests interline effort to maintain high standards of service and prescribe the best routes for traffic.

**Common language waybill?** ..... p.28

Railway Systems & Procedures Association hears progress reports on paperwork standardization and simplification. Chicago meeting spotlights need for uniform waybills and train consists.

**RI president urges rail-truck cooperation** ..... p.34

Downing B. Jenks proposes organization to take collective action on matters of mutual concern.

**The Action Page—More net from heavier carloads** ..... p.38

The surest route to higher net earnings is increased intensity in the use of railroad facilities. The logical place to begin is to increase the load per car—especially in box cars.

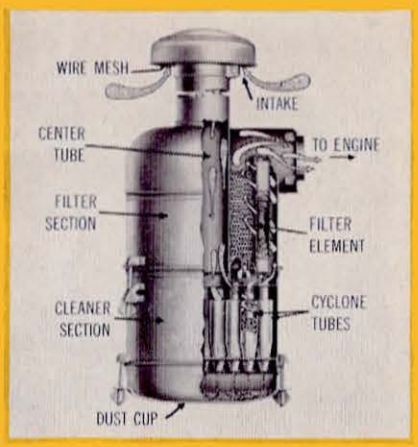
# SPECIAL REPORT TO CATERPILLAR OWNERS:

CAT CATERPILLAR

Parts you can trust. Dependable round-the-clock service

## New Caterpillar dry-type air cleaner: CUTS SERVICING TIME 75% AVAILABLE FOR FIELD INSTALLATION on D8, D9, DW20, DW21 and No. 583

**AIR-BORNE DUST** is the deadly enemy of your engine's vital parts. Now, the new Cat dry-type cleaner gives positive protection against the entrance of harmful dirt—and its simplified servicing requires only about 5 minutes instead of 20 as with the oil-bath type!




**THE NEW CATERPILLAR DRY-TYPE AIR CLEANER** removes 99.8% of the air-borne dust from the intake air, even under the most severe conditions. Air enters through the stack cap where wire mesh screens out leaves and similar trash. Then the air passes down the center tube and swirls down the cyclone tubes. Centrifugal action throws the dirt against the sides of the tubes. From here 95% of the dirt falls through the funnel section into the dust cup, and the relatively clean air passes on to the resin-impregnated, cellulose filter. This element removes the rest of dirt and allows only clean air to enter the intake manifold. Filter elements can be cleaned and have lasted 3,000 hours without loss of efficiency.

**SERVICE COSTS ARE SLASHED!** Here is the experience of WEGCO Equipment Rental, Inc. of Cleveland, N. C., as told by the Superintendent of Maintenance, Mr. George R. Bell, "The dry-type cleaner saves us money. We have to clean our air cleaners daily because of dusty conditions. The oil-bath cleaners take about 20 minutes to clean and 5 quarts of oil. That's 60 cents in labor and $1.28 worth of oil, a total of $1.88 per machine. This dry-type cleaner takes only 5 minutes to service—about 15 cents labor. It saves us $1.73 on each machine every day."

**SERVICE TIP:** To empty dry-type cleaner dust cup, simply loosen wing nuts, remove cup, empty and replace. Occasionally the filter element will need cleaning. Merely remove it, blow off dust or wash in water, then replace.

**YOUR CATERPILLAR DEALER** has the story on how *you* can save by changing to the new and efficient Cat dry-type air cleaner. Remember, he'll carry your complete parts inventory. See him today!

Caterpillar Tractor Co., Peoria, Illinois, U.S.A. **CATERPILLAR**

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## Week at a Glance CONT.

## Current Statistics

| | |
|---|---|
| Operating revenue | |
| 1 mo., 1959 | $784,227,845 |
| 1 mo., 1958 | 779,752,776 |
| Operating expenses | |
| 1 mo., 1959 | 644,544,329 |
| 1 mo., 1958 | 651,090,608 |
| Taxes | |
| 1 mo., 1959 | 78,905,591 |
| 1 mo., 1958 | 73,375,829 |
| Net railway operating income | |
| 1 mo., 1959 | 36,160,074 |
| 1 mo., 1958 | 31,914,879 |
| Net income estimated | |
| 1 mo., 1959 | 22,000,000 |
| 1 mo., 1958 | 18,000,000 |
| Average price 20 railroad stocks | |
| March 17, 1959 | 109.95 |
| March 18, 1958 | 69.17 |
| Carloadings revenue freight | |
| Ten weeks, 1959 | 5,629,451 |
| Ten weeks, 1958 | 5,372,664 |
| Freight cars on order | |
| March 1, 1959 | 28,789 |
| March 1, 1958 | 43,750 |
| Freight cars delivered | |
| 2 months, 1959 | 4,426 |
| 2 months, 1958 | 12,535 |


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*Short and Significant*

### Transcontinental TOFC to the Northwest . . .

got its second participant last week. Northern Pacific began offering fourth-morning piggyback deliveries to Seattle, Tacoma and Portland from the Twin Cities and Duluth-Superior, fifth morning from Chicago. A week earlier, Milwaukee Road started Flexi-Van service between Chicago and Seattle-Tacoma.

### Santa Fe's ICC passenger deficit . . .

was lower rather than higher in 1958, reversing a trend. Last year the road cut off branch-line trains and consolidated others in light-traffic seasons, saved 2,396,000 train-miles.

### Competition from a new quarter . . .

is threatened by a proposed limousine service between New York and Washington. Under the plan (for which an ICC examiner has recommended Commission approval) luxury limousines would operate on regular four-and-one-half-hour schedules between the two cities. Proposed fares—$12.50 one way, $20 round trip—compare with one way parlor car charges of $18.88 before tax. Protestants include the Pennsylvania, Port of New York Authority, City of New York, and motor carriers.

### North Dakota's surplus crew law . . .

is no more. Governor John E. Davis signed the bill last week. It eliminates the third brakeman on freights of more than 40 cars.

### Extension of volume rates on coal . . .

to large consumers in New York, Philadelphia, Wilmington and Baltimore is proposed by eastern railroads serving these points. Rates would apply on steam coal moving from mines in Pennsylvania, Maryland and northern West Virginia. Object is to protect millions of tons of coal traffic by inducing big consumers not to switch to residual fuel oil.

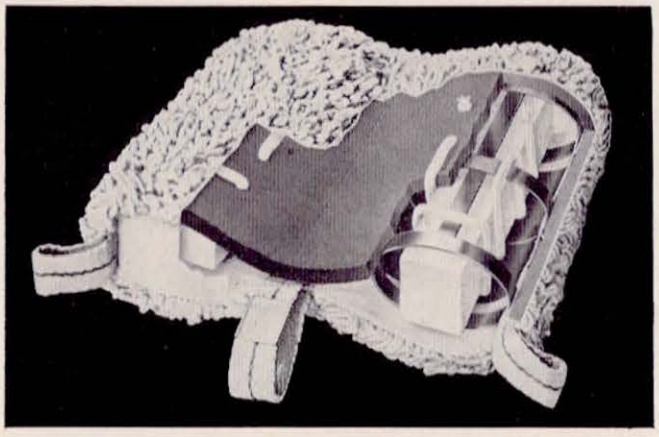
### The air fare discount . . .

of 10% for official military travel has been approved by the Civil Aeronautics Board. With the discount, the decision said, air carriers "have succeeded in breaking the railroads' virtual monopoly over military business which existed prior to 1950." It also said this gain could not be held without the discount which "has done no more than make possible a healthy and vigorous air-rail competition for military passenger traffic."

# NOW MAGNUS OFFERS THE PRACTICAL SOLUTION

## to the freight car HOT BOX PROBLEM

*Magnus Lubricator Pads and R-S Journal Stops give two-way protection against all major causes of road setouts due to bearings— provide the bearing performance railroads WANT, at a cost they can AFFORD TO PAY—RIGHT NOW!*

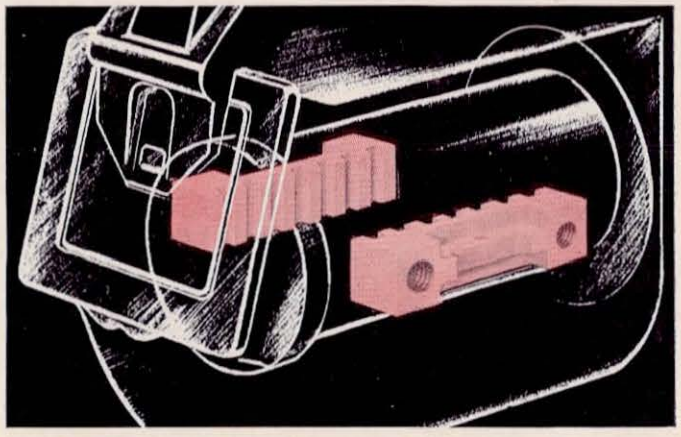


### MAGNUS LUBRICATOR PADS

**wick more oil, hold more oil, provide uninterrupted journal lubrication**

Use Magnus Lubricator Pads to deliver the maximum amount of oil to the journal from an abundant oil supply. There's 3-way wicking—circumferential, internal and center-feed—and each pad holds 2.5 times its own weight in oil—better than 5.9 pints for the 6″x 11″ size.

Rugged one-piece twin-lobe construction assures long life. Thoroughly tested internal springs provide *maximum and constant* resilience—pads just can't lose contact with journal during their useful life. The cover is heavy pre-shrunk duck, tufted with quality cotton yarn and backed by high-capillarity felt. In all, it's a lubricator pad designed by bearing experts to give you the performance you want and need.



### MAGNUS R-S JOURNAL STOPS

**stabilize the whole bearing assembly— double bearing life, cut hot boxes 90%**

With R-S Journal Stops you keep the bearing in proper position at all times—restrict fore-and-aft movement of the axle to 3/32″ in either direction. That prevents dust guard damage, lets oil seals work. You increase miles per hot box ten times, *miles per cut journal* fifteen times. You reduce wheel flange wear, cut truck maintenance costs all along the line.

Initial cost is low—less than 2% of new car cost—and you get that back in less than 3 years. That's why R-S Journal Stops are your best bet for better bearing performance.

***For complete information on R-S Journal Stops and Magnus Lubricator Pads write to Magnus Metal Corporation, 111 Broadway, New York 6, or 80 E. Jackson Blvd., Chicago 4.***

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# N.Y. Plan Proposes Rail Relief

Unfair taxes, the difficulty of financing new commuter equipment, and full-crew laws are the target of N.Y. committee's proposal. Some railroaders are asking if the pattern would apply elsewhere.

**► The Story at a Glance: Former C&O legal chief Robert W. Purcell and five associates with special experience in transportation problems have recommended to Governor Rockefeller three basic kinds of relief for New York railroads:**

**► A gradual switch from taxation based entirely on replacement values to a form of taxation on net earnings, coupled with immediate repeal of special franchise taxes on the privilege of operating passenger service.**

**► A change in state law to give the Public Service Commission authority over "full-crew" requirements rather than setting minimum crew sizes by law.**

**► A self-sustaining commuter-equipment leasing plan to be run by the Port of New York Authority.**

**Governor Rockefeller immediately announced that the report would form "the basis for recommendations . . . for appropriate legislation."**

**Meanwhile, railroaders in other cities are wondering if the principles developed might spark a breakthrough elsewhere.**

In keeping with a campaign pledge, one of the first actions after taking office of New York's Governor Rockefeller was the appointment of an advisory committee on commuter problems. With Robert W. Purcell at its head, this committee was asked to prepare a realistic program for the continuation and improvement of "the transportation facilities so vital to the continued growth and prosperity of the area."

Mr. Purcell and his associates, Herbert Askwith (chairman, Westchester Commuter's Group and author of a study on commuter problems made for the Twentieth Century Fund), F. S. Columbus (chairman emeritus, BLF&E), Arthur Genet (formerly with the C&O), Harry Herman (county attorney, Westchester County), and Ernest Williams (professor of transportation economics, Columbia University), submitted their detailed proposals to Governor Rockefeller last week (RA, March 16, p. 7).

"This report reflects a practical approach to the solution of one of our most vexing problems," Governor Rockefeller said. "It represents a determined effort to achieve the most realistic remedy to the commuter problem feasible under present conditions. It points the way to an effective attack on the problem of assuring the thousands of commuters in this State of dependable, prompt and efficient transportation service to and from their jobs. The report will serve as the basis for recommendations I shall make shortly for appropriate legislation."

The 76-page "Special Report to the Governor on Problems of the Railroad and Bus Lines of New York State" makes three specific recommendations for rail relief (as well as a proposal to lower bus taxes). Most important is a major overhaul of New York's taxing structure to start in 1960 and be put into effect in gradual stages by fiscal 1962-1963. If adopted, this proposal would relate railroad taxes to earning power of the properties being taxed. This would be done by determining the full reproduction cost, less depreciation of all taxable railroad property in the state.

All roads earning 10% or more on their reproduction cost before taxes and fixed charges would be assessed a maximum of 100% of this cost. Any road earning less than 10% of reproduction cost would be assessed lower maximums. If a road earned 6% on its reproduction costs, its maximum assessment could not be more than 80%; for a 2% earnings ratio, the assessment could not be more than 40%, for 1% or less, not more than 20%.

"The purpose of the program," the report states, "is to give greater emphasis in the taxation system to the element of economic worth while still retaining, but to a less important extent, the traditional concept of reproduction cost. It is obviously desirable to give greater relief to the railroads who need it most, therefore I have recommended a formula which gives increasingly greater weight to economic

**CAN NEW YORK SET A PATTERN?**

| A CHECKLIST OF OTHER RAIL COMMUTER CITIES THAT HAVE PROBLEMS SIMILAR TO THOSE THE PURCELL PLAN DEALS WITH | BOSTON | CHICAGO | PHILADELPHIA | S. FRANCISCO |
|---|---|---|---|---|
| **TAXES** | X | X | | X |
| **EQUIPMENT FUNDS** | X | | X | |
| **'FULL CREW' LAW** | X | | | |

factors as the rate of earnings of a railroad system declines." The minimum assessment of 20% of reproduction value is based on scrap values.

On a short-term basis, the report recommends immediate abolition of approximately $1,580,000 of local special franchise taxes on the privilege of using and occupying public places in the operation of railroad passenger business. Most of these taxes are now levied in New York City. Other, relatively minor, taxes would also be abolished immediately.

If the recommended program were now in effect, the report estimates that total tax revenues would be reduced by approximately $15,000,000, about $6,000,000 of which would be in New York City. (This is the same amount requested in the 1959 legislative recommendation of the Associated Railroads of New York). To help the communities that would suffer from loss of railroad taxes, the report proposes state aid in varying amounts up to 50% of the community's tax loss.

Another section of the report calls for the state to make available up to $20,000,000 of its capital construction funds for the purchase of new commuter cars for the New York Central's Hudson and Harlem division, the New Haven and the Long Island. This money would be loaned to the Port of New York Authority, which could use it as the basis for purchase of an $80,000,000 car order—about 400 new cars. The cars would be leased to the railroads on a long-term basis. The Authority credit would be protected by the state, which would guarantee the leases against default. The Port Authority quickly announced its willingness to participate in the plan. Before the Authority can act, though, the bi-state agency will have to get the approval of the New Jersey legislature, which has indicated it wants to examine the plan further.

Third of Mr. Purcell's proposals was that the New York Public Service Commission be given jurisdiction over the number of men required to operate trains in the state. Under present law, the size of train crews is governed by a "full-crew" law.

Although the report deals primarily with the problems of railroads operating into New York City east of the Hudson River, Mr. Purcell recommended that New York and New Jersey join in the creation of a bi-state agency to stabilize the commuter situation within New Jersey and across the Hudson.

The immediate reaction of the railroads most affected was favorable. Alfred E. Perlman, president of the New York Central, released a letter he had written to Mr. Purcell calling the proposals a "commendable move in the right direction" that deserves the "whole-hearted support of the public and the transportation industry." George Alpert, president and chairman of the New Haven, commented that "the outstanding feature of the proposal is that taxes are geared to net income."

The Long Island, which is recognized by the report as a special case since it

*(Continued on page 26)*

# Watching Washington *with Walter Taft*

• **NEITHER MANAGEMENT NOR LABOR** is happy about the House Interstate Commerce Committee's version of proposed legislation to liberalize the Railroad Retirement and Unemployment Insurance acts. The House received the committee's bill and report late last week. On the Senate side, the matter was still pending before the Committee on Labor and Public Welfare.

**THE HOUSE COMMITTEE'S BILL** embodies much of the Railway Labor Executives' Association program and a little of the AAR's counterproposal. It would raise benefits under the Retirement Act by 10% and increase unemployment benefits by amounts ranging up to 20%. Meanwhile, it would go along on some of the Unemployment Act amendments suggested by the AAR.

**INCREASES IN PAYROLL TAXES** paid by the railroads would amount to $100,000,000 a year at the outset. This would include a $43,000,000 rise in unemployment taxes, which are paid entirely by the railroads, and a $57,000,000 increase in Retirement Act taxes. A like increase in the latter would also be paid by employees.

**LABOR'S REACTION** came in a resolution adopted by RLEA. It said the union leaders were "shocked and dismayed" when they looked over the committee's bill, especially its proposed amendments to the Unemployment Insurance Act. They will now seek to have the House reject the committee's recommendation and pass a bill embodying the RLEA program "without major amendment."

**MANAGEMENT'S REACTION** came from AAR President Daniel P. Loomis. He said the "tax-ridden" railroads "simply cannot absorb" the additional expense and at the same time finance the purchase of new equipment "so greatly needed in our expanding economy."

**THE LOOMIS COMMENT** was in a letter to Senator Morse of Oregon, who is principal Senate sponsor of the RLEA program. The AAR president was responding to the Oregonian's recent call for an investigation of the supply of freight cars. He took occasion to suggest again that solution of the car-shortage problem would be aided greatly by favorable Congressional action on tax-law amendments proposed by the railroads to permit them to accumulate construction reserve funds and shorten depreciation terms on their property.

• **BOTH SIDES** of the railroad industry's diversification proposal are now before the Senate's Interstate Commerce Committee. The proposal is the industry's call for more freedom to operate other forms of transport.

**BILLS** to carry it out have been introduced, on the "by request" basis, by Senator Butler of Maryland. Senator Smathers of Florida previously introduced a bill to prohibit operation by a regulated carrier of more than one form of transport. The railroad proposal has been made controversial by the motor carrier industry whose leaders call it the "greatest single threat" facing the independent trucker and "the shipping public as well."

# The number one insulation for over a half century!

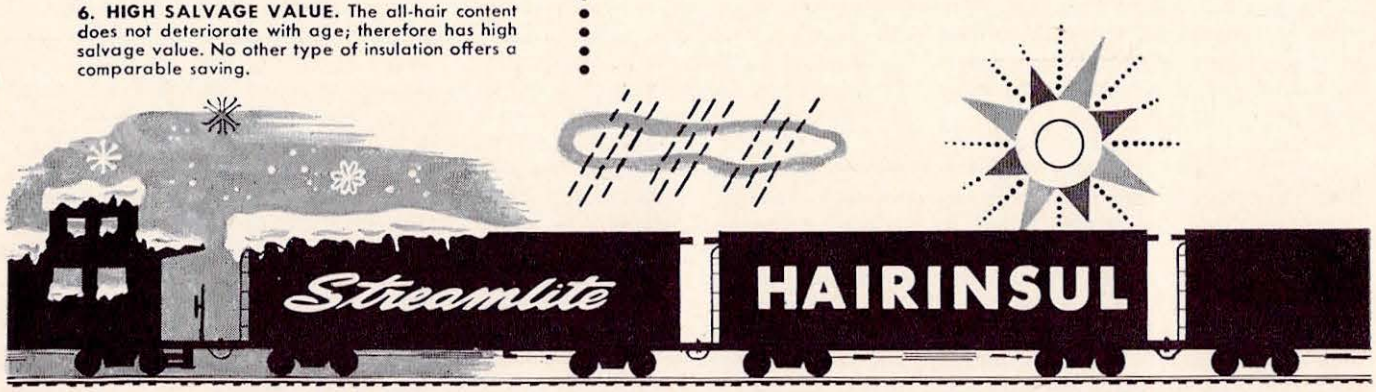
**SIX MAJOR REASONS WHY LEADING REFRIGERATOR CAR LINES SPECIFY *Streamlite HAIRINSUL***

1. **LOW CONDUCTIVITY.** Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity—.25 btu per square foot, per hour per degree F., per inch thick.
2. **LIGHT WEIGHT.** Advanced processing methods reduce weight of Streamlite Hairinsul by 40%.
3. **PERMANENT.** Does not disintegrate when wet, resists absorption. Will not shake down, is fire-resistant and odorless.
4. **EASY TO INSTALL.** Blankets may be applied to car wall in one piece, from sill to plate and from one side door to the other. Self-supporting in wall sections between fasteners.
5. **COMPLETE RANGE.** Streamlite Hairinsul is available ½" to 4" thick, up to 127" wide. Stitched on 5" or 10" centers between two layers of reinforced asphalt laminated paper. Other specified coverings are available.
6. **HIGH SALVAGE VALUE.** The all-hair content does not deteriorate with age; therefore has high salvage value. No other type of insulation offers a comparable saving.

Since Hairinsul was first used in refrigerator cars more than 50 years ago, it has protected millions of dollars worth of perishables through all weather conditions—no matter how severe.

Present-day Streamlite Hairinsul, the result of improved processing methods, offers refrigerator car builders 40% less weight. The factor of lighter weight, added to the five other exclusive advantages of Hairinsul, assures refrigerator car builders today's more efficient insulation.

**AMERICAN HAIR & FELT COMPANY**
Merchandise Mart • Chicago 54, Illinois




***SETS THE STANDARD BY WHICH ALL OTHER REFRIGERATOR CAR INSULATIONS ARE JUDGED***

'ORCB Members Urged to 'Circulate the Truth'
RLEA: 'Management Guilty Of Featherbedding on RRs'
Facts, Straight Facts, Furnished
EditorialsPeddling'Featherbedding' Bunk of Management Hit by RLEA
Unions Accuse Railroads Of Bad Faith in Job Talks
Rail Labor Chiefs Cite 'Runarounds'
Railway Labor to Fight Railroads' Wholesale Abandonments of Passenger Service

# The RR Story: Who Tells It Best,

**► The Story at a Glance: Railway labor's high command gets its story across to the rank-and-file. Railway management, by and large, doesn't. But there's a growing belief that it should, and could.**

This year railroad management has a story to tell—and to sell: on restrictive rules, on wages, on retirement-unemployment benefits. The people who deal in employee communications, however, see several high hurdles to be cleared before that story can be told effectively. Among them:

- Management's traditional policy on labor relations matters, as phrased by one railroad officer: Never say anything to anybody at any time about any subject.
- The unions' virtual monopoly in the communications field now. In many cases the railroad employee knows little about proposals or negotiations affecting his job—little except what he reads in his union journal.

Listen to what a puzzled shipper has to say. He can't figure why employee communications in the railroad industry hasn't made the strides it has in other industry:

"Take this city here. It's a heavy industry town and it's a union town. We've got a plant here and the railroads have a big operation. We've got people working for us who have the same last name as the people who work for the railroads. They live on the same streets, they go to the same churches, they belong to the same clubs. But we've got no labor relations problem to speak of and the railroads seem to have one almost all the time. So far as I can see, there's only one explanation—we can communicate with our people and the railroads can't, or haven't."

Or take this comment, which comes from a railroad officer:

"Railroads are finally beginning to stir on this communications problem—but we're not really in the creeping stage yet. Other companies in other industries are 10 to 15 years ahead of us in developing programs. But this year we could make great forward strides. I think we'll catch up."

Union communications programs, in contrast, have little catching up to do. Almost every railway brotherhood has its newspaper or magazine. Some—notably the Brotherhood of Locomotive Engineers and Brotherhood of Locomotive Firemen & Enginemen—now have two. In addition, 17 unions own and publish the weekly newspaper "Labor," which is circulated across craft lines.

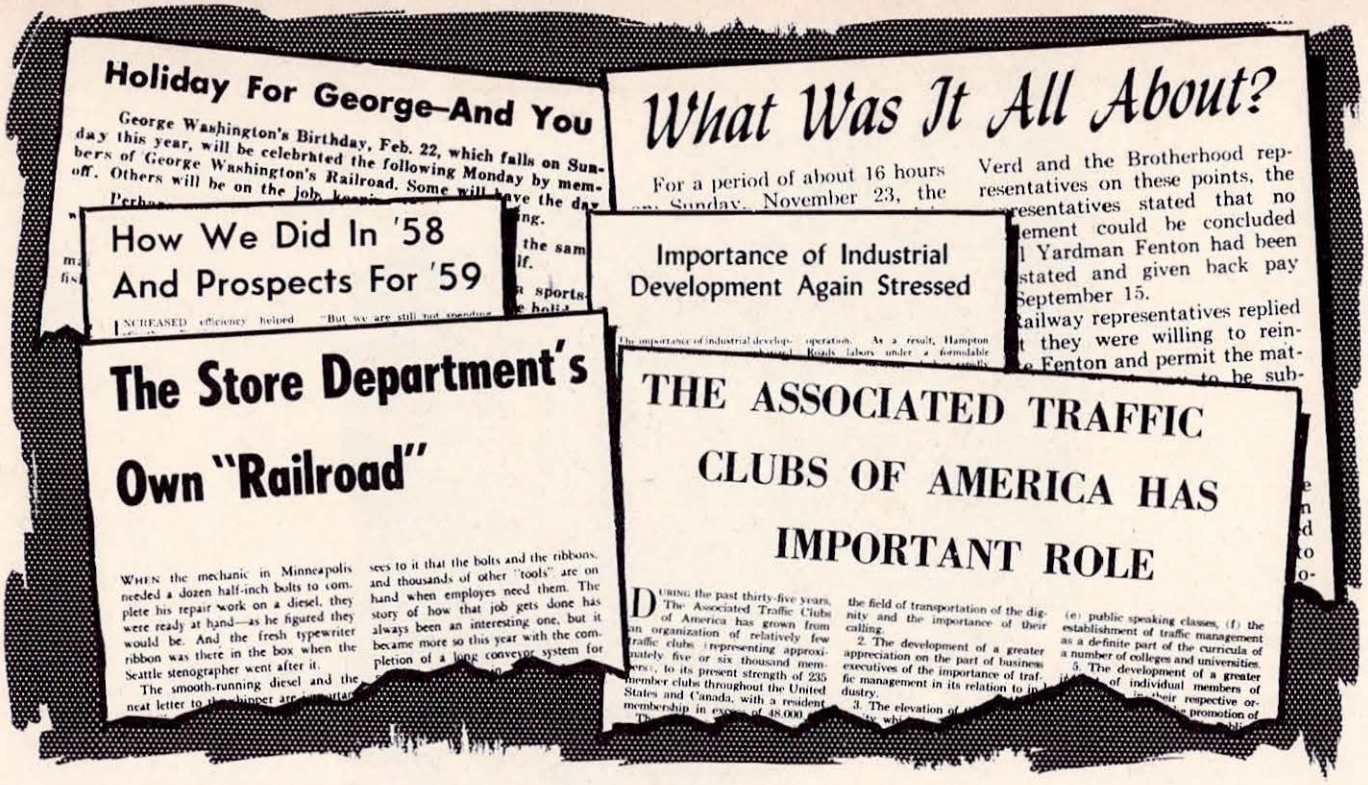
Few of these publications have visible qualms about launching outright attacks on management. "Labor," in particular, has been vitriolic. Headlines like these —"State Official Says Rails Lie to Get OK on Abandonment"; "Railroad Officials Blasted in Court"; or "Rail Unions Blast 'Featherbedding' Charges as a Hoax"—are reasonably typical of the week-to-week treatment of railway labor news.

No one in management is contending that railroads should fight this fire by running to get their own box of matches. But there is a definite feeling, in some quarters, that the employer's position should be placed squarely and directly before the employee.

"I believe one of the best solutions to all these [labor] problems," Great Northern President John M. Budd said recently, "is better communications—an improvement in getting information to rank-and-file employees. Unfortunately, much of their basic information now comes only from the unions."

Several factors have been cited as causes for management's silence on employer-employee matters:

- Tradition—the firmly rooted belief that discussion of labor problems should be neither seen nor heard. The decision to open up publicly on the featherbedding issue may indicate a fading of tradition—but even this action has so far been aimed mainly at winning support outside the industry.
- Fear of disturbing the surface calm. Negotiations, in one form or another, are usually in progress on individual roads. Management doesn't want to provoke the union reaction that might follow an attempt to talk directly to the worker.
- The "what's the use" philosophy.



Holiday For George—And You

George Washington's Birthday, Feb. 22, which falls on Sunday this year, will be celebrated the following Monday by members of George Washington's Railroad. Some will have the day off. Others will be on the job, keeping ...

What Was It All About?

For a period of about 16 hours on Sunday, November 23, the Verd and the Brotherhood representatives on these points, the representatives stated that no agreement could be concluded ... Yardman Fenton had been stated and given back pay September 15.

Railway representatives replied ... they were willing to reinstate Fenton and permit the matter to be sub-

How We Did In '58 And Prospects For '59

INCREASED efficiency helped ... "But we are still not spending ...

Importance of Industrial Development Again Stressed

The importance of industrial develop... operation. As a result, Hampton ... Roads labors under a formidable ...

The Store Department's Own "Railroad"

WHEN the mechanic in Minneapolis needed a dozen half-inch bolts to complete his repair work on a diesel, they were ready at hand—as he figured they would be. And the fresh typewriter ribbon was there in the box when the Seattle stenographer went after it.

The smooth-running diesel and the neat letter to the shipper are ... sees to it that the bolts and the ribbons and thousands of other "tools" are on hand when employes need them. The story of how that job gets done has always been an interesting one, but it became more so this year with the completion of a long conveyor system for ...

THE ASSOCIATED TRAFFIC CLUBS OF AMERICA HAS IMPORTANT ROLE

DURING the past thirty-five years, The Associated Traffic Clubs of America has grown from an organization of relatively few traffic clubs representing approximately five or six thousand members ... to its present strength of 235 member clubs throughout the United States and Canada, with a resident membership in excess of 48,000 ...

the field of transportation of the dignity and the importance of their calling.

2. The development of a greater appreciation on the part of business executives of the importance of traffic management in its relation to ... dustry.

3. The elevation of ... by which ...

(e) public speaking classes, (f) the establishment of traffic management as a definite part of the curricula of a number of colleges and universities.

5. The development of a greater ... of individual members of ... their respective or... promotion of ...

# Labor Unions or Management?

• The alleged difficulty in presenting a positive approach in telling management's story. Union papers say to their readers, "We're working for YOU." Management, too, works for the best interests of its employees—but in many cases management's program may be a long-range one aimed at improving the property and thus making better jobs. That, sometimes, is far harder to point out in print.

In the face of these obstacles, however, some roads are making efforts to communicate on labor matters. Usually, the employee magazine has been the medium for telling the story.

The Elgin, Joliet & Eastern recently told its employees of the events leading up to a Trainmen's strike. The presentation was factual. It was low-key, completely stripped of the emotional aspects which a strike produces. The union's general chairman fired back a reply, setting forth the union attitude. EJ&E printed his letter.

The Union Railroad at Pittsburgh told its people last fall, in some detail, how poor employee productivity is hurting the railroad. Figures were quoted, showing a decline in traffic and a decline in crew productivity. URR's approach was calm, factual, straightforward.

Most recently, New York Central's "Headlight" came out with a question-and-answer presentation covering union demands for liberalization of Railroad Retirement benefits. NYC pointed out that the union proposal, which stresses increased benefits, will also mean higher taxes for employee and employer. For the railroad, this means higher costs, which can be met in one of two ways —by raising rates or cutting expenses. Rate increases drive away business, cost-cutting reduces employment opportunities.

"Talk it over with your fellow employees," Central said. "Look at both sides of the argument and make up your own mind as to what is really in your best interest. Then . . . let your Senators and your Representatives know how you feel on the subject."

On these three roads—EJ&E, URR and NYC—management has channeled its story through the employee magazine. Most roads could do likewise. Some would first have to establish such a publication (and several major carriers are in that category).

By and large, the company magazine —by design or by accident—has never developed much beyond the folksy stage. It tells employees about the history of various operating divisions, about new equipment in use, about revenues and expenses, about management planning, about promotions, deaths and marriages.

"If an employee magazine is going to earn its keep," one editor commented, "it's going to have to do more than most of them do now. It's going to have to get over into this direct communication field. With a calm, reasoned presentation, I think it can serve effectively."

A public relations officer was even more blunt:

"Take this featherbedding thing. If our employees are going to read comment on it in their own brotherhood publications—and you know they are—why shouldn't they get the other side from us? It's a legitimate area for discussion. Public relations will never produce effectively until it's mated with an effective personnel relations program. Sure, we have to have public opinion with us—but you'd think the first 'public' should be our own people. So often, though, they're disinterested because they lack information or because they've received too much from the other side."

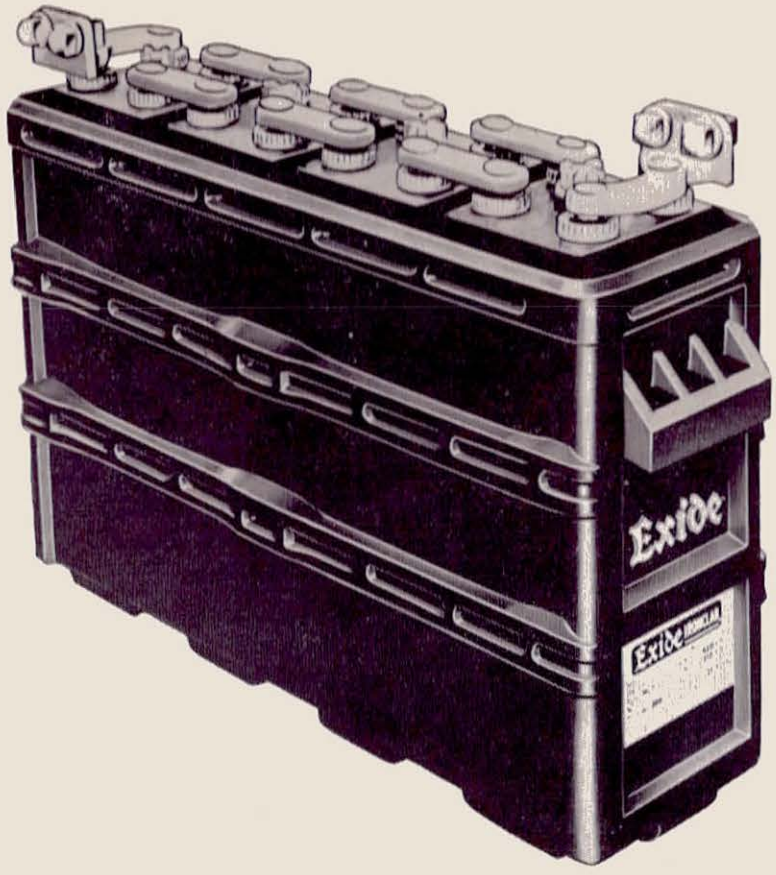
Both the editor and the PR man noted what may be the biggest hurdle facing management in any effort to communicate on labor issues: how to treat the controversial in non-controversial fashion.

"If we were to present just the management side," the editor said, "we'd have a real uphill fight. The union can say 'we're working for you.' But no matter what it is, if it comes from management, it's always suspect."

"Anything controversial," the PR man said, "would have to be very thoughtfully done. A firebrand wouldn't be the man for the job by any means.

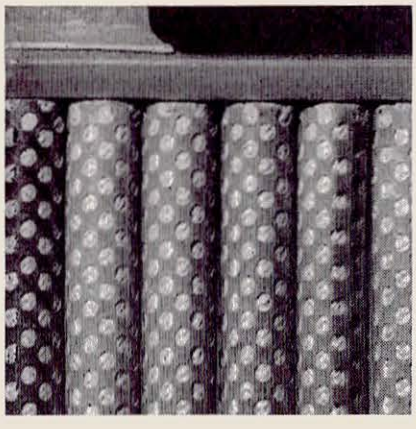


Continued on page 18 ►




# How This Exide-Ironclad Diesel Locomotive Battery Saves You Money

## —and is saving money right now for 64 American railroads



**50 years and never been equaled.** Exide first introduced the now-famous Exide-Ironclad tubular positive plate battery 50 years ago. All this time, users have consistently proved its superior power and greater economy. Latest improvement is armored porous tubing, shown above . . . packs more power into every plate . . . extends battery life.

**1 Costs less to buy.** Every dollar buys you more battery power even than for previous model Exide-Ironclads. That's because this improved design battery makes more efficient use of battery materials . . . packs its power into less space. Savings in manufacture are passed on to you.

**2 Lower annual cost.** The new armored porous tubular construction of the positive plates virtually eliminates loss of active material. So the Exide-Ironclad gives even longer life of service. Your investment goes farther. Annual battery cost is lower. And you get actually superior battery performance as a bonus.

**3 Reduces your spare battery requirements.** It is today's most versatile diesel locomotive battery. Improved design Exide-Ironclad delivers full power for large locomotives. Yet it fits the battery compartments of many smaller ones. So every battery you have is more useful.

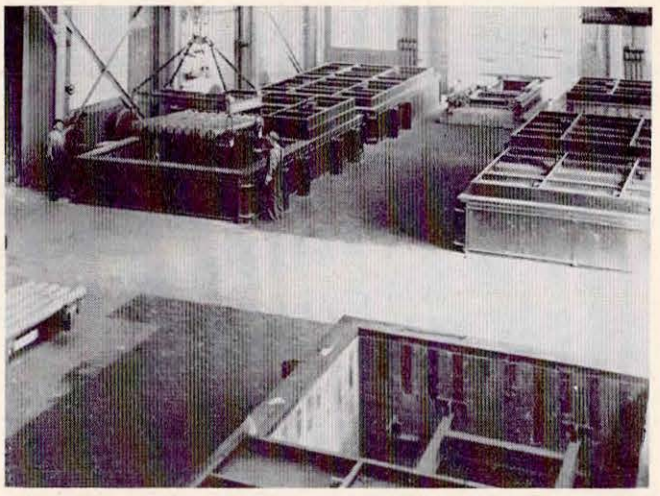
Not only greater economy, but unmatched performance too. That's what you get in the improved Exide-Ironclad: as much as 50% more diesel cranking power than other batteries of identical rating . . . an average of 100% greater capacity in quick recovery tests . . . longer sustained voltage for hard-to-start engines. These are some of the typical ways that Exide-Ironclad pays off in performance . . . and no other battery can match them.

**Get the 8-page illustrated bulletin on Exide-Ironclad Diesel locomotive batteries. *And ask about details on the new, portable chargers for every diesel battery application.* Write Exide Industrial Division, The Electric Storage Battery Company, Philadelphia 20, Pa.**

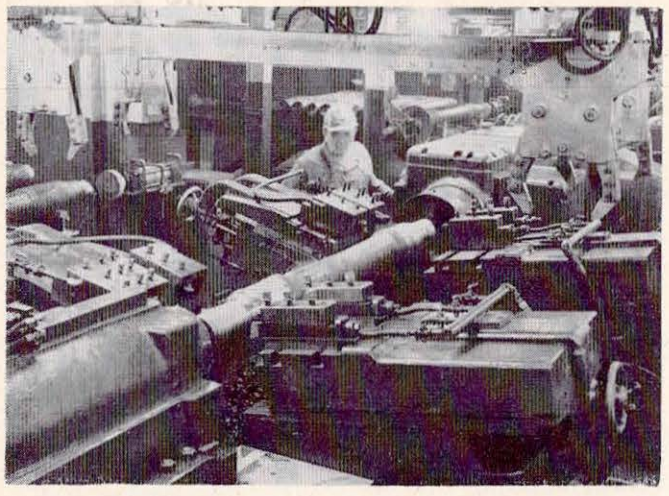
**Exide®**

# Bethlehem Speeds Axle Making

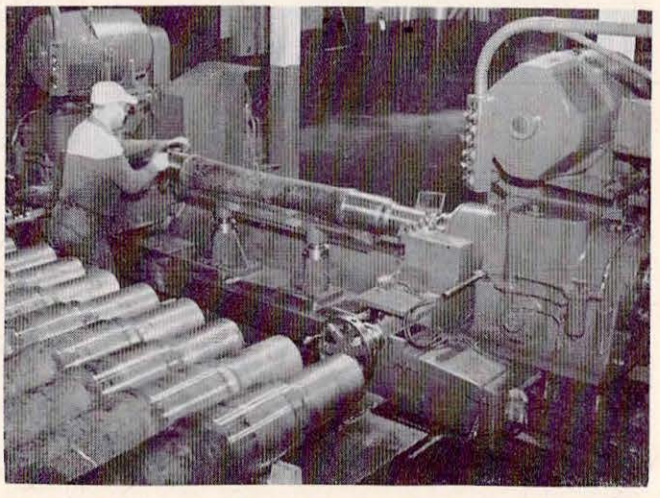
**AXLE FORGING** is shaped under 10,000-lb steam hammer. Charging crane delivers bloom from furnace to hammer.



**CONTROL COOLING** of axles is carried out in pits where cooling rate is retarded to eliminate residual stresses.



**ROUGH MACHINING** of roller-bearing axles is performed on double-end automatic lathe equipped with carbide tools.



**TRACER CONTROLLED** automatic lathe is used to machine semi-finish on journals, dust guards, wheel seats.

The demand for freight-car roller-bearing axles has increased sharply. To meet it, the Bethlehem Steel Company has set up a new production line at its Johnstown, Pa., plant.

Operations have been realined for direct, progressive movement of work. New high-speed equipment and tools for heating, forging and machining have been installed.

From ingots to finished axles machined to the close tolerances specified for freight-car roller bearings, requires about 15 separate operations.

But first, before starting down the production line, axle blooms are rolled from the ingots, cooled, and inspected for surface imperfections. They are then ready for the first forging operation.

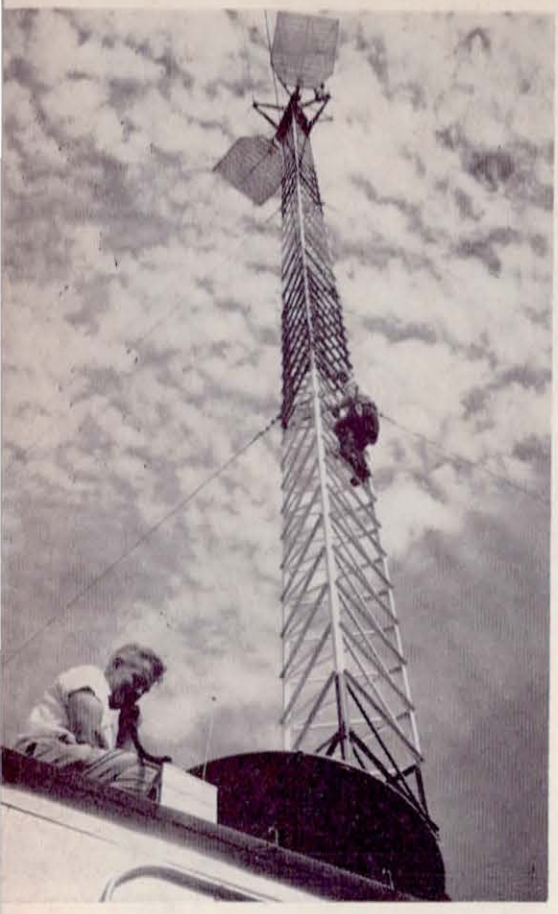
Axle blooms are heated to forging temperature in a three-zone rotary furnace. Automatic controls eliminate the variables found in manually operated equipment. Next, the blooms are forged by one of two 10,000-lb steam hammers, then straightened in a special press. After control cooling to remove residual stresses—and heat treatment, if ordered—the axles are ready for machining.

Special machine tools are used to achieve the close tolerances that must be maintained. An automatic sequence machine saws the forgings to length, mills the end faces, and drills centers. Next, automatic lathes with carbide tools rough turn the journals, dust-guard and wheel seats. If required, shaper lathes with carbide tools finish machine the axle bodies.

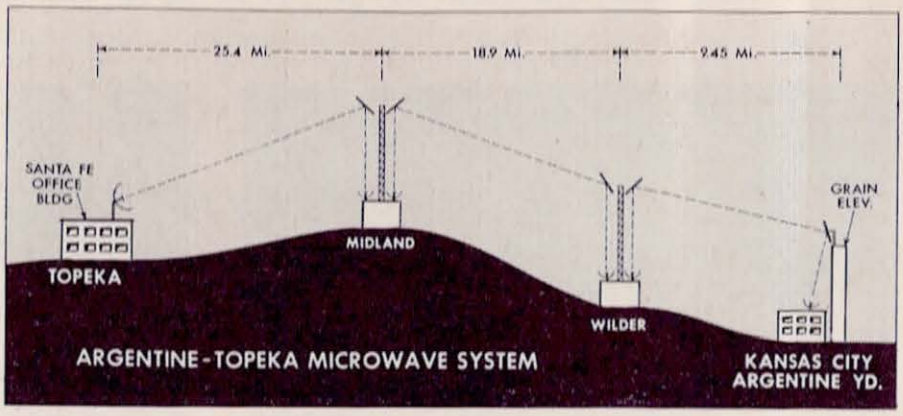
A four-station automatic cycle machine drills and taps the roller-bearing end cap holes in both ends simultaneously. Then one of two tracer control, dual-end drive lathes performs the semi-finish turning of journals, dust-guard and wheel seats. Two contour grinders finish grind the axles. Each has a 13¼-in. wide contoured grinding wheel that permits plunge cuts to be made, producing exact dimensions in a minimum of time.

Cold rolling, if required, is done on a hydraulic burnishing lathe.

For shipment, journals and wheel seats are protected by one coat of African slush and wrapped in non-rust wax paper. Finally, they are wrapped with "pillo pad" secured by banding.



MICROWAVE SIGNAL is beamed upward to the passive repeater (atop metal tower) where it is reflected over the tops of trees and terrain to the next station.




# Santa Fe Adds More Microwave

New system is expected to have high reliability despite rigors of the weather in the Kansas City-Topeka area.

A third microwave system has just been installed by the Santa Fe. It links Kansas City, Kan., with Topeka.

Maintenance expenses are expected to be less than would be required for line wires and pole lines of the same circuit capacity.

The new system also is expected to have high reliability during winds, sleet or floods that would damage existing pole lines.

The Santa Fe's two other microwave systems link Galveston, Tex., and Beaumont, and Cushenbury, Cal., and San Bernardino. A fourth system is under construction between San Bernardino and Los Angeles, headquarters of the road's Coast Lines.

The new microwave link provides 48 voice channels to meet the increasing demands for additional circuit capacity.

The Santa Fe's huge Argentine yard is at Kansas City. It also has diesel locomotive shops and many grain elevators there.

Headquarters for the Santa Fe's Eastern Lines are at Topeka. The road's executive offices are at Chicago. Hence, a large volume of railroad printing telegraph and telephone communication moves between Topeka and the Kansas City area, and, via Kansas City, between Topeka and Chicago.

Because microwave is "beamed" radio, direct line-of-sight is required from station to station. The hilly country in the Kansas City-Topeka territory necessitated two repeater stations between the two terminals. The Topeka microwave terminal is in the general office building there. The antenna is on the roof. As Argentine yard is in a river valley, the microwave signal cannot be beamed from the AT&SF office direct to the repeater station. To gain the elevation necessary to reach the repeater, a passive reflector was mounted on top of a grain elevator to "bounce" the microwave beam from the office toward the repeater.

Specifications for the repeater stations included availability of commercial electric power and access from an existing public road or railroad property. Preliminary choices for their sites were made from United States Geological Survey maps.

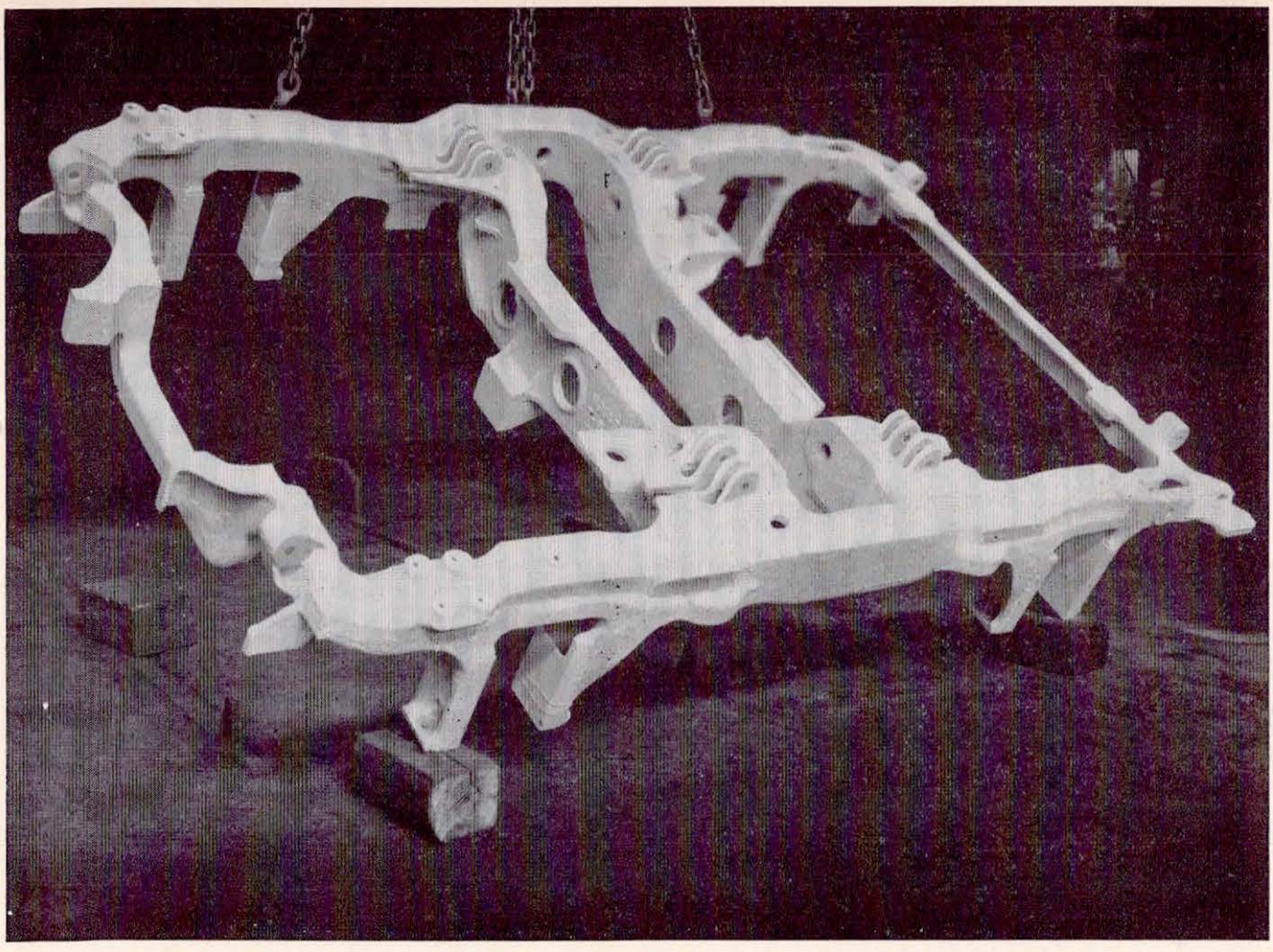
To check whether the necessary line-of-sight path existed, a flashing mirror method was used. A man at one station site used a mirror to reflect sunlight toward the next site. An observer at the remote site, some 25 miles away, used a portable radio to report when he saw the reflected sunlight.

Repeater stations were established at Wilder, on railroad property, and at Midland, on land purchased for the purpose. A large area, 2.5 acres, was bought so that if a storm knocked the tower down, adjacent land would not be involved.

At all locations but Topeka, passive reflectors on towers reflect the signal to the antennas on the roofs of the small sheet metal buildings at Midland and Wilder, and on the office building at Argentine.

Space is available at each location for a standby prime-mover-driven power supply. For the present, this equipment is omitted. A system of electric clocks records power outages and microwave system failures. In the four months of test service, the availability was 99.99%.

The project was under the jurisdiction of J. A. Parkinson, general superintendent communications and signals.



One-piece 2¼% nickel, low carbon steel truck frames are being supplied to New York Transit Authority by General Steel Castings Corporation. Cast nickel steel truck frames resist stress of swift accelerations and stops.

# Truck horse! One-piece truck frame of cast nickel steel is all muscle

## *...reduces weight with thinner sections*

**A railroader's alloy...strong, fatigue-resisting, weight-saving:** Nickel steel has exceptionally high strength, excellent shock resistance and may be readily welded. Truck frames of 2¼% nickel cast steel resist the physical shock of sudden impact and fatigue resulting from repeated stresses of high magnitude.

With nickel steel, designs that save appreciable weight are possible in equipment such as truck frames. The greater strength and shock resistance of the steels permit reduction of section thicknesses. The cast 2¼%, low carbon steel, normalized and tempered, easily meets the following specifications:

| | |
|---|---|
| *Tensile Strength* | *75,000 psi* |
| *Yield Point* | *48,000 psi* |
| *Elongation in 2"* | *25.0%* |
| *Reduction of Area* | *50.0%* |

**32-page booklet yours for the asking.** "Nickel Alloys in Railroad Equipment" shows how Nickel alloys are helping to lower operating costs and raise safety factors in diesel-electric and electric locomotives . . . in passenger and freight cars. Write:

**THE INTERNATIONAL NICKEL COMPANY, INC.**
67 Wall Street New York 5, N. Y.

INCO TRADE MARK

# INCO NICKEL

## NICKEL ALLOYS PERFORM BETTER LONGER

## THE RR STORY

(*Continued from page 13*)

Any story would have to be thoroughly factual. After all, the issue here isn't people, it's principle."

While management ponders the problem, union leaders are keeping the typewriters hot. Railway Labor Executives' Association releases blasting management are turning up in brotherhood magazines. An article in defense of the fireman's existence has been reprinted in many major union publications.

Employees are being fully informed of the union position in such matters as train-off cases, station consolidations, court battles with the carriers and the progressing of contract demands.

Take the issue of featherbedding, as three passenger train crewmen see it:

"I know we're not working a full eight hours," a trainman in commuter service said, "but it's the company's fault, not ours. They tell us when to work."

"Look at this train here," a parlor car attendant said. "We've got two men in the cab of that engine up there and they [management] want to get rid of one of them. I wouldn't be surprised if they did it—they seem to be able to get rid of just everybody else they want to."

"Featherbedding," a flagman snorted. "That fellow [AAR President Daniel P. Loomis] talks about featherbedding and here I sit. I've been on duty since early this morning and here it is, almost seven o'clock at night. Some featherbed."

Overcoming these reactions will be difficult, may be impossible. But many railroad officers think it's worth a try.

## Railroading After Hours with Jim Lyne

**MOST CITIFIED CITY**—All the nation's metropolitan areas are suffering from blight at the center—that is, the suburbs are growing at the expense of the "central city." A booklet by the Committee for Economic Development gives the figures that tell the story, as I've already noted here.

But some "central cities" are better off than others. That is, the proportion of business done in the center—in comparison to the suburbs—is a lot higher in some urban areas than others. And it's Baltimore that heads the list. At the bottom of the list (with suburbs relatively far more important than the central city) are Pittsburgh, the Boston area and Los Angeles.

Shopping in the central city is being killed off by "the shift away from mass transit"—and the consequent congestion which has resulted, as more and more people seek to do all their movement by private auto. There were hardly any more people entering the New York business district in 1956 than there were in 1940.

**GIFTS FOR CUSTOMERS**—Jim Gibboney of National Aluminate tells me of an idea his company is trying out—to solve the problem of Christmas remembrances to company customers. I never could see any harm in some little token gift. The Monon used to give its big customers a two-bit package of stone-ground corn meal (very good, too). Nevertheless, there's always the problem of where to draw the line, both as regards the number of recipients and size of expenditure.

Jim tells me, this past season, his company took the modest sum it would have spent for this purpose and made scholarship contributions to a number of university students of engineering, who were interested in railroading. It then sent greeting cards to customers who might ordinarily have received a Christmas remembrance—telling them of the alternate use made of the money. Jim says thank-you letters from customers, and even their wives, were more numerous and enthusiastic than they were when actual gifts were sent.

**SPEAKERS' GENERAL**—Dana Phillips, purchasing agent of the Boston & Maine, is making a record for himself in his spare time—as manager of the speakers' bureau of the Boston Railroad Community Committee. The committee has a group of upwards of two dozen railroaders who are trained to make speeches on practically any aspect of the railroad business, anywhere in New England.

Under Mr. Phillips' methodical generalship the number of speaking engagements is steadily going up—having now attained the rate of over 30 per month; and there's no indication that the peak has yet been passed. They're organized to provide a speaker at any time—including legal holidays—and with hardly any advance notice.

**WHERE'S THE "DISUNITY"?**—I have been privileged to see an interchange of correspondence, in which a railroader widely respected for his wisdom discusses the question of unity and disunity of railroad managements on policy matters. He sees no virtue in too much unity—e.g., management acceptance of rigid standardization of equipment and track. Unless there's room left for variation and experiment, where's improvement to come from?

Even on the question of journal bearings—while he leans toward the roller bearing—he is glad to see diversity of action, and continued experiment with pads and other kinds of lubrication.

The two major internal policy decisions facing the railroads, he believes, are "firemen" on diesels and red-ink passenger trains. And he knows no railroad managers who believe "firemen" are needed on diesels, or any who believe a railroad should be denied the right to pull off a red-ink passenger train if it wants to. So where's there any significant disunity?

Agreements on some questions would come easier, he concedes, if there were fewer railroads—hence logical mergers are desirable. But criticizing railroads for "disunity" is something of a red herring—a lame excuse for not dealing equitably with them in taxation and regulation.

**WANTS A STEAM LOCO**—I got a look at a "want ad," to be inserted on the appropriate page in this issue—a little railroad in Pennsylvania (the Strasburg by name) is in the market for a light steam locomotive. On inquiry, I found out that the company—now a freight carrier only—has in mind going into the passenger business. It has already got itself a coach, and is now looking for suitable motive power.

# Current Railroad Questions

Our Car Service Quiz in the February 23 issue called for solutions that would involve maximum empty travel of 75 miles. Actually, this should have been *85* miles. If anyone who has already sent in a solution wishes to change it, he may do so.

We're introducing a new question in today's column, on impact registers. There is a wide split in opinion on these devices. Some claim that registers work best if their presence is advertised, others if it is concealed. What do you think? . . . *G.C.R.*

## What Is the Best Way to Use Impact Recorders?

"Shippers are beginning to use impact recorders in carload shipments which are suffering damage as a result of rough handling. Shippers can thereby pinpoint the railroad responsible and handle the problem directly with that railroad. This is in lieu of placing a claim against all roads handling the shipment and having each participate in the claim without any one road knowing which was responsible.

"This is an excellent system. It certainly tends to alert all railroads handling such commodities to prevent the possibility of being singled out as the one responsible for the damage. I do not think, however, that this is the responsibility of the shipper. The railroad industry should endeavor to handle freight without excessive impacts and should use its own impact recorders to determine whether this is done.

"Large classification yards are generally erroneously blamed for all excessive impacts. It has been our experience here at Potomac Yard that many excessive impacts occur while the train is being handled on the road, rather than in the terminal.

"Best results from impact recorders can be obtained by using them regularly on various types of shipments, as well as in empty cars. When recorders are used only on a spot-check basis too frequently, the use of the recorder is made known to everyone handling the car. Such a car will receive careful handling, whereas the one next to it will receive the usual heavy impacts from switching operations.

"Impact recorders should not only be used with loads of a fragile nature, or those subject to damage as a result of impact, such as coil steel. They should also be used in empty equipment to ascertain the type of handling such equipment gets from the yard crews as well as other crews under whose charge the empty car is moving. We have placed impact recorders in many empty cars here at Potomac Yard to determine whether the cars are receiving excessive impacts during classification. If crews get in the habit of switching such cars with heavy impacts they will switch loaded cars in the same manner, with the result that the lading will be damaged.

"Yard crews should definitely *not* have advance notice that impact recorders are in use. In fact, the recorder should be placed in the car by someone in a supervisory position who can be trusted to keep the information to himself so it does not become common knowledge that a car has been 'bugged.'

"Mechanical department crews or train crews, knowing that a car contains an impact recorder, will frequently chalk on the side of the car the word 'bug'. This tells not only the employees at the point of installation, but railroad employees throughout the country, that the car contains a recorder and should be handled carefully.

"The point is that we would like all our crews to handle all cars carefully so claim payments can be minimized.

"Data from impact recorders should be used as a basis for disciplinary charges. However, in my opinion, difficulty might be experienced in trying to use such data. Management is now faced, in handling formal disciplinary charges with the operating brotherhoods, with the possibility that all members of the train crew would state that at the time the impact recorder indicated the car received an excessive impact they were not handling the car. Or, if it could be proved they were handling the car, that it was not coupled in excess of four miles an hour in their opinion. Since these men would be eyewitnesses to the handling of the car, their testimony would have to be used against the record of the recorder."—*D. C. Hastings, superintendent, Potomac Yard.*

## Why Are Rail Joints Staggered at Midpoints of Rails?

"I have always read your column with interest, and have been interested in the 'staggered joints' items now appearing. On a tour of Europe, September 1957, I rode over many lines, and noticed, especially in Italy, that curve alinement was noticeably poor because of the parallel joints. The train would lurch badly at each joint. By merely sighting along the rails, it could be easily seen that the joints were pushed toward the outer direction of the curve.

"On the other hand, there is a question which I would like to pose: 'Why are rails made in 39-ft lengths today?'

"I am well aware of the historical reason for this length, i.e., the 40-ft flat car. However, today, with 65-ft drop-end gons, why aren't rails made in lengths of, say, 120 ft? Great effort has been made on rail welding. Why not eliminate the joint entirely? Why cannot rails be rolled at the mills in 1/8- or 1/4-mile lengths, and transported in coupled sets of flat cars?

"While the 'square' joints of the European lines may not be suitable for our heavy axle loads, the longer rails, which appeared to be perhaps 150 ft (probably 50 meters) in length, might well have a place here.

"It looks to me that we are laying rails the hard way."—*J. William Vigrass, Cleveland, Ohio.*

**CONDUCTED by G. C. RANDALL,** district manager, Car Service Division (ret.), Association of American Railroads, this column runs in frequent weekly issues of this paper and is devoted to authoritative answers to questions of interest to railroaders at all levels of responsibility. Readers are invited to submit questions and when so inclined, letters agreeing or disagreeing with our answers. We will pay $10 for questions suggested by readers, which are used in this column. Communications should be addressed to Question and Answer Editor, Railway Age, 30 Church Street, New York 7.

# NEW IMPROVED ELECTRO-MOTIVE

## Increased Capacity

Short time ratings are greatly improved to the extent that insulation destruction is virtually impossible in Electro-Motive's new improved D-47 traction motor. Major improvements in insulation, stator coils, ventilation and power cables provide extra capacity without an increase in motor size.

## Reduced Maintenance

A new stator baffling arrangement assures complete cooling of both armature and stator to extend service life and reduce maintenance. Stator coils are precision-fitted to frames, thus eliminating coil shifting and resultant wear on insulation. In addition, the new trapezoidal trunnion pinion end bearing has a far longer life than any previous type of pinion end bearing.

## Longer Service Life

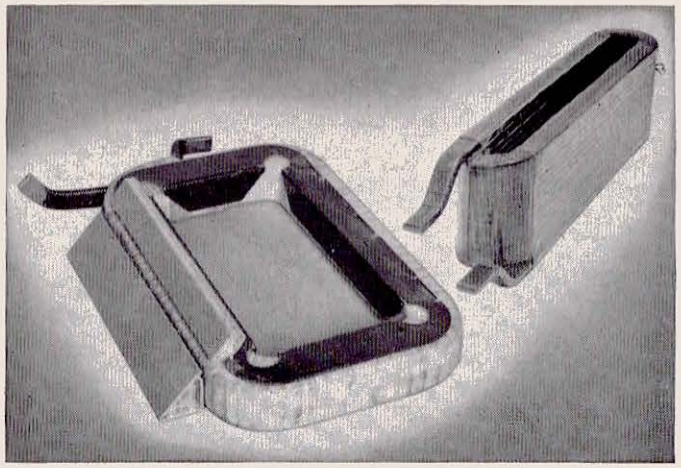
Among the significant improvements in the D-47 motor is the application of an epoxy resin coating over the commutator end wire bands to insulate against flashover damage. More than 3000 motors are now in service with this insulation—not one has reported flashover damage to band wires.

* * *

Older model (D-7, D-17, D-27 and D-37) traction motors can be turned in on the purchase of modern D-47 motors.

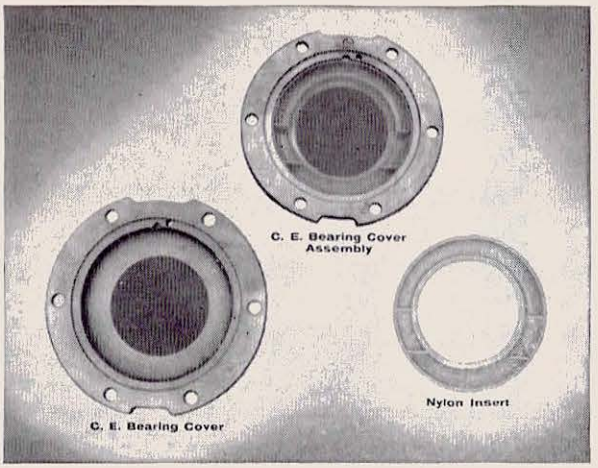
**ELECTRO-MOTIVE DIVISION**
**GENERAL MOTORS** • La Grange, Illinois
*HOME OF THE DIESEL LOCOMOTIVE*
**In Canada:** General Motors Diesel Limited, London, Ontario

GENERAL MOTORS LOCOMOTIVES



**MAIN AND INTERPOLE COILS**

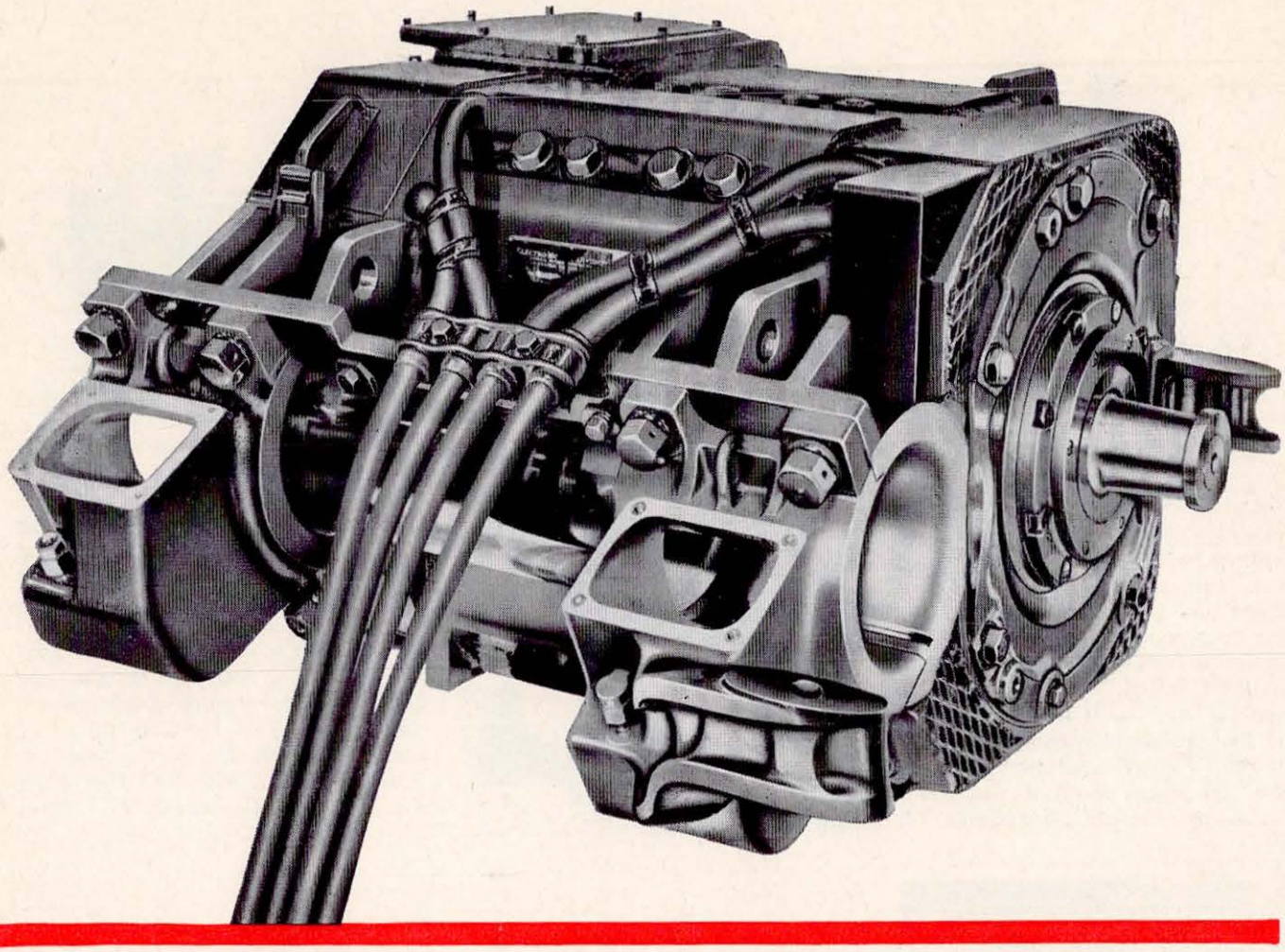
Increased copper to increase load capacity. Silicone insulation for cooler operation. Full-length aluminum baffles for greater strength.

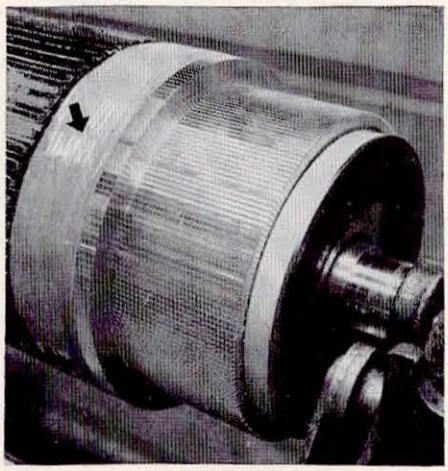



**NYLON INSERT FOR C.E. BEARING**

Sectionalized nylon insert for commutator end bearing prevents breakdown of lubricating grease. Longer-lasting grease lowers maintenance.

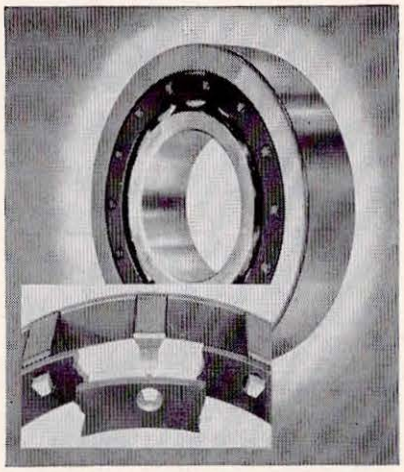
# D-47 TRACTION MOTOR





## COMMUTATOR END WIRE BANDS

Coated with glass and epoxy resin to eliminate flashover damage. Epoxy coating has excellent insulating qualities and high adhesion strength to withstand stress and vibration.



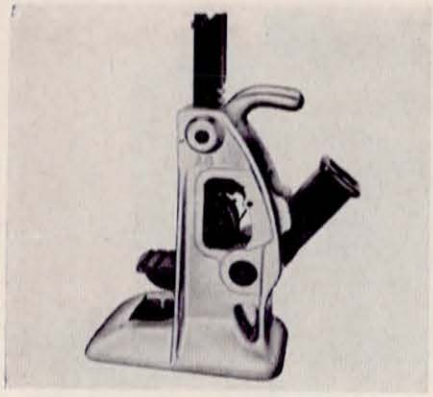
## PINION END ARMATURE BEARING

Trapezoidal shape of trunnion portion of bearing cage imparts far greater strength.

## HI-LIFT WICK LUBRICATOR

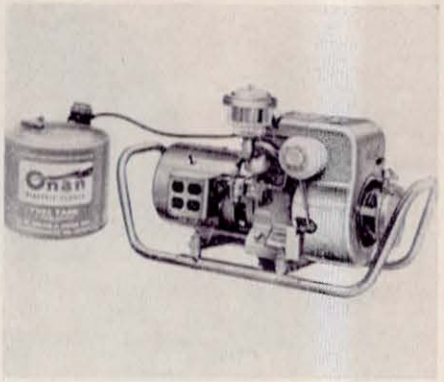
Felt is laminated with protein material to produce high capillary action. Hi-lift wick provides complete lubrication with first turn of axle under heavy load conditions.

# New Products Report



## Granular Herbicide

Designed for pre-emergence application is a new granular weed and grass killer called Soil Sterilant. It is said that any type of spreading equipment may be used to apply the material. It is claimed to be non-poisonous and non-corrosive, and is being offered for the control of most types of vegetation where year-long control is desired in areas inaccessible to on-track application. *R. H. Bogle Company, Dept. RA, P.O. Box 588, Alexandria, Va.*

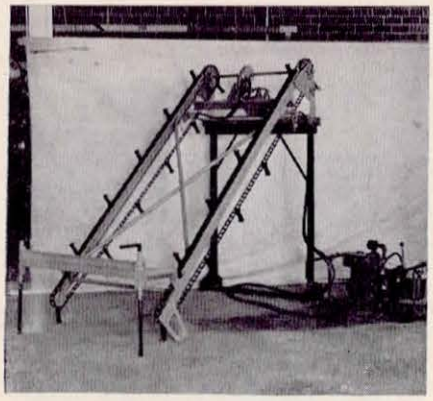



## High and Low-Lift Jack

To eliminate the need for supplying trackmen with two different kinds of track jacks, one for high and another for low lifts, a new lightweight jack has been made available. The unit, Model A8, has a capacity of 15 tons with a maximum lift of 7¾ in. and a minimum lift of 2 in. It is 15⅝ in. high and has an aluminum-alloy housing. It has thumb guards and trips on both sides. *Templeton, Kenly & Co., Dept. RA, Gardner Road, Broadview, Ill.*

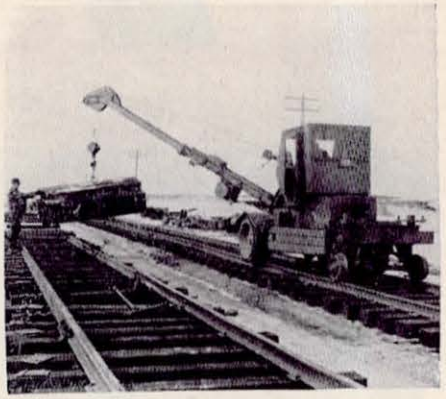
## Portable Generator

Weighing 140 lb, a new generating plant is offered as a portable unit or for emergency service. It is furnished in two models. Model 205AJ-1P/1430 for construction jobs, and Model 205-AJ-1M/1430 is the standby unit. Both are identical in size and weight, and deliver the same type of electric power, either combination 115/230-volt ac or straight 230-volt ac. *D. W. Onan & Sons, Inc., Dept. RA, 2515 University Ave., S. E., Minneapolis 14, Minn.*



## Track Spike

A new track spike, named the Spencer-Spike, has been introduced. It is the same as the conventional cut spike except that the upper portion of the shank is twisted at an angle of about 15 deg. The function of the twist is to provide a tighter grip in the holes of the tie plate. The effect, it is said, is to "lock" the tie plate against the tie and/or the base of the rail. *Jones & Laughlin Steel Corp., Dept. RA, 3 Gateway Center, Pittsburgh 30, Pa.*



## Tie Unloader

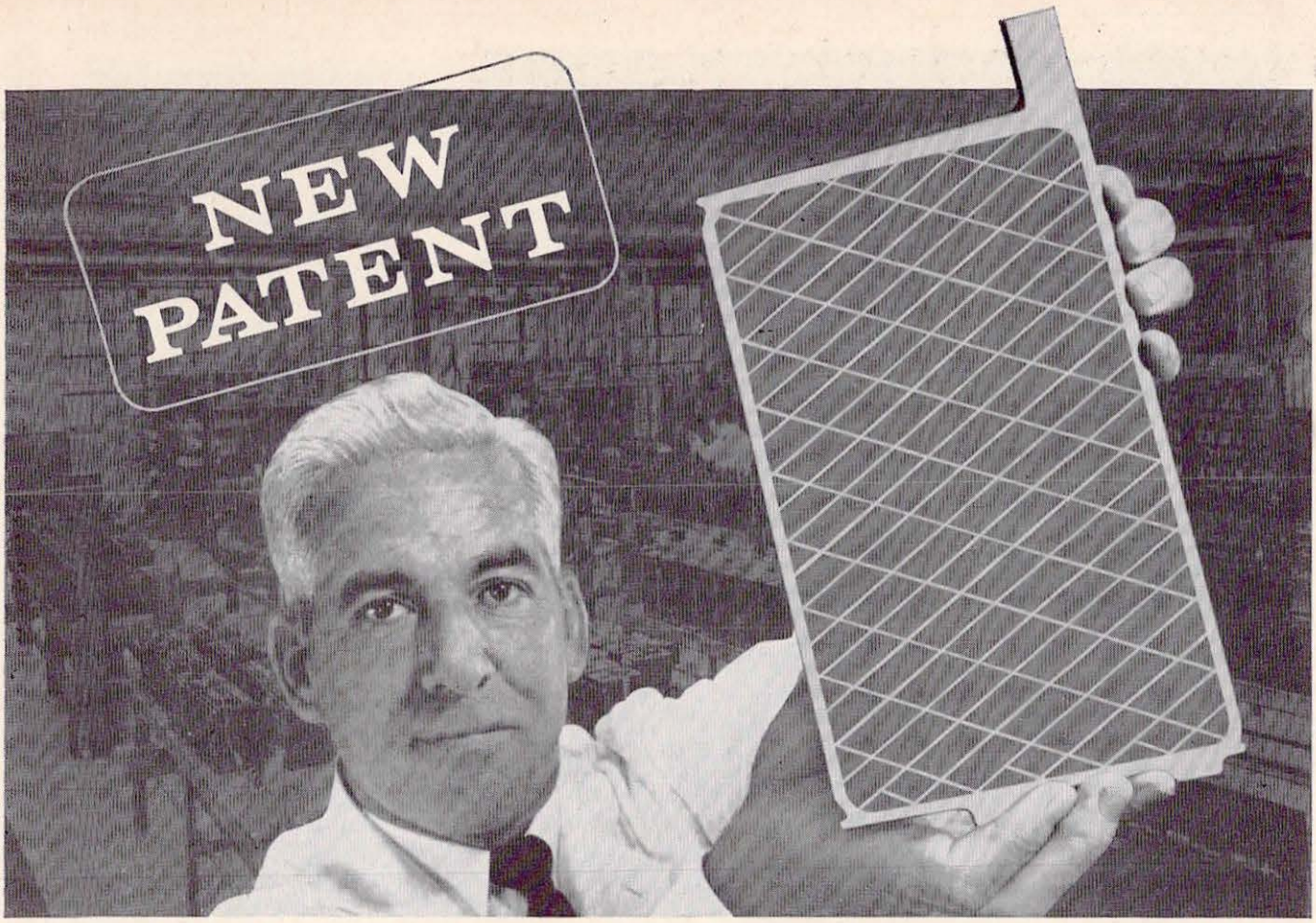
The Fairmont W101 Series A Tie Unloader is designed to work in a standard gondola car for unloading ties at designated points. The portable conveyor weighs less than 300 lb. The power unit, also portable, weighs an additional 200 lb. When in use, the inclined conveyor and loading platform are placed inside the car. The power unit and the operator's platform hang on the outside. *Fairmont Railway Motors, Dept. RA, Fairmont, Minn.*

## Vegetation Killers

Two new chemical formulations are offered for vegetation control. One, called "Trysben," is said to be effective for controlling certain broad-leafed, deep-rooted perennials. The other called "Dybar" fenuron weed and brush killer, comes in tiny pellets for dry application. It is recommended for the control of many species of woody plants found east of the Rocky Mountains. *E. I. du Pont de Nemours & Co., Dept. RA, Wilmington 98, Delaware.*

## Mobile Crane

Equipped with retractable flanged wheels and standard rubber-tired wheels, the Rail-O-Road Krane Kar is now available with all-hydraulic operation in addition to the mechanically operated models. Features of the hydraulic machine are hydraulic boom telescoping, swinging and topping, load hoisting, and the raising and lowering of the flanged wheels. *Silent Hoist & Crane Co., Dept. RA, 841-877 63rd Street, Brooklyn 20, N. Y.*




# The New *gould* SILCONIC Plate Lengthens Battery Life 10-25%

**Two distinct improvements:**

**1.** Gould has developed a new patented (July 1958) process for introducing Silver-Cobalt into the active materials of the positive plates of Motive Power Batteries.

The temporarily soluble silver-cobalt sulphates, when added to the active materials, migrate to all positive grid members.

The Sulphates collect on the grid members to form an insoluble oxide surface or protective sheath which is impervious to acid and oxygen attack.

**2.** In order to insure a homogeneous grid completely free of flaws, a carefully determined amount of arsenic is added to the regular metal. This produces a smooth flowing metal during the casting operation which results in an extremely dense and uniform grid.

By selectively adding the silver-cobalt and arsenic to the plate, Gould is able to produce the new *SILCONIC* positive plate . . . a Gould exclusive.

*Gould Diesel Starting Batteries with New Silconic Plates resist corrosion, hold their charge, and last longer.*

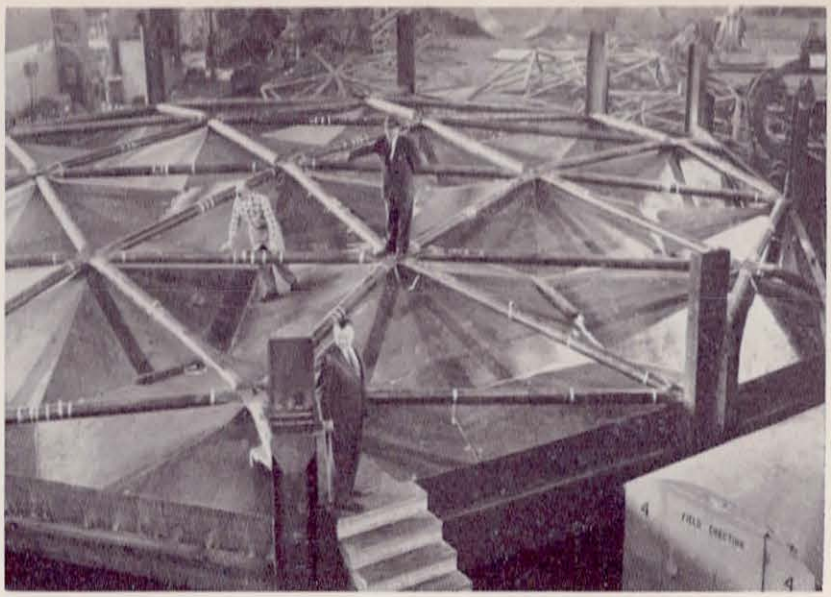
**HOLDS CHARGE LONGER.** In those applications where batteries are idle for periods of time the *SILCONIC* Plate is ideal. This Silver-Cobalt coating prevents migration of materials to the negative plate, effectively reducing self discharge within the cell.

**MIGRATION OF SILVER-COBALT ATOMS.** The migration of Silver-Cobalt atoms continues throughout battery life, offering continuous resistance to the corrosive attack of acid and oxygen. This continuous effect is the result of a solid state migration of the Silver-Cobalt which penetrates deeper and deeper into the grid metal during battery operation, thus prolonging the life of the *SILCONIC* Plate.

**LONG-FULL SHIFT OPERATION ASSURED.** Comparative tests between *SILCONIC* and conventional plates prove that the *SILCONIC* Plate maintains maximum capacity for a considerably greater portion of its service life, retards the tendency toward grid growth, assures longer full shift operation of batteries.

Write for complete data or call your local Gould representative. He's listed under "Batteries Industrial" in the yellow pages. Gould-National Batteries, Inc., Trenton 7, N. J.

*More Power to you from Gould*



## Newest Dome-Shaped Car Shop Takes Form

Second geodesic-dome car shop to be built by and for the Union Tank Car Co. will be completed this year at Wood River, Ill. Original dome at Baton Rouge, La., enclosed 110,000 sq ft and cost less than $1,000,000 (RA, Oct. 20, 1958, p 25). New design, materials, and construction method used by UTC subsidiary Graver Tank & Manufacturing Co. will reduce the cost of this new shop "substantially" although it is to be the same size as the one at Baton Rouge. A big factor in cutting costs has been the 175,000 sq ft of Jones & Laughlin 11-gage, 84-in. wide, hot-rolled steel sheet which reduces waste and welding in forming the hexagonal pyramids (see cut) that make up the shell which is 116 ft high and 375 ft in diameter. Center of dome top was completed first and is being raised over a large expandable pneumatic bag to permit application of the successive courses which form the complete shell.

# ORT Loses 'Job Freeze' Round

The job stabilization fight being conducted by the Chicago & North Western and the Order of Railroad Telegraphers is on its way to the U. S. Supreme Court.

Latest development in the hassle, an appeals court ruling, has tossed out in their entirety the ORT's contentions. The union has said it will take the case to the high court.

The ORT has been after the establishment of a rule in its contract with C&NW which would prohibit the road from abolishing any job in existence Dec. 3, 1957, except by agreement with the union (RA, Sept. 22, 1958, p. 36).

The issue arose through C&NW's victories in South Dakota and Iowa with its central agency program.

The appeals court commented that "this is an attempt by the union to arrogate to itself the prerogatives that have been traditionally and rightfully management's, while, at the same time, assuming none of the corresponding burdens and responsibilities."

The court's opinion was that "it appears clear that the effect of the union's proposal, if accepted, would place in its hands the power to prevent any undertaking by North Western to meet competition by modernizing its operations in the light of technological development, and fulfilling its obligation of operating efficiently and economically for the benefit of itself, its employees and the public.

"Ultimately the union could even bring about a situation where the railroad itself might be forced out of business or so crippled financially that all employees, including the union's members, would suffer."

Acceptance of the contract proposal would enable the union "to control the pace of North Western's compliance" with the orders of state commissions.

The court also ruled that the demand for a job freeze is completely outside the scope of rates of pay, rules and working conditions as defined by the Railway Labor Act, and therefore is not a proper subject for mandatory bargaining.

It gave North Western a permanent injunction against a strike on the issue.

## ICC Says Eastern Roads Can Keep Mixing Rule

A victory over competing truckers has been won by eastern railroads in their long-drawn-out fight to keep "Streamlined Rule 10." That's a version of the mixing rule which permits it to be used in combination with all-commodity rates, i. e., it provides that commodities rated lower than the all-commodity basis will be charged only such lower rates when included in a carload taking an all-commodity rate.

The rule has been in effect since 1942, and the Interstate Commerce Commission has had it under investigation for several years. It condemned it in 1955, but soon stayed its order and reopened the case (No. 31006) for the further hearing out of which the present favorable report has come.

The railroads said they needed the rule to keep forwarders competitive with truckers and thus increase forwarder tonnage moving by rail. It was also supported by the National Industrial Traffic League.

The Commission recalled that its condemnation of the rule, in the previous report, was based pretty much on its feeling the all-commodity rate level should be the floor for a mixed carload, and its finding that the rule's effect was to reduce the carload charge that would otherwise accrue under the all-commodity rates. The present report says:

"The record at the further hearing would not support this finding, except in a theoretical, mathematical sense. In practice, the elimination of the rule would result in a revenue loss to the carriers. In the prior report we attached great weight to the fact that the all-commodity rates were intended to apply on the entire contents of the mixed carload, including articles in the mixture taking lower ratings. While the original purpose of the all-commodity rates is entitled to consideration, its evolution in practical use cannot be ignored."

## Nuclear Freight Car Scale To Be Shown at Tokyo Fair

An operating model of the New York Central's high speed nuclear scale for weighing rolling freight cars is on its way to Japan.

Complete with electric train, railroad track and gamma ray source, the model will be a feature of the U. S. atomic energy exhibit at the International Trade Fair in Tokyo. The 17-day fair opens May 5.

The railroad plans to install a full-size field scale in a freight yard during the coming year.

Rail-end buildup

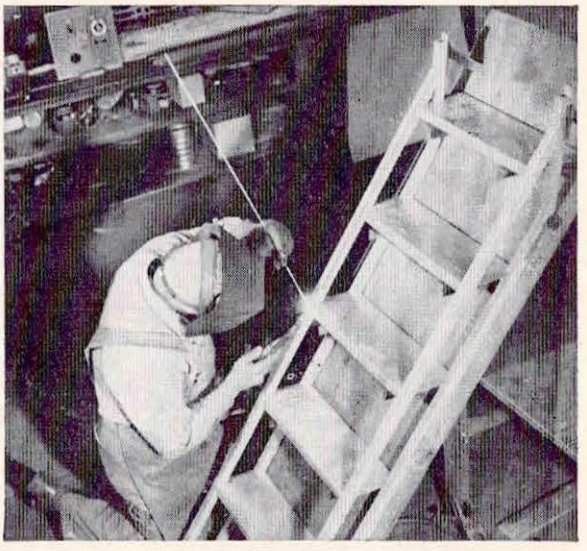
# FABRICATION MAINTENANCE REPAIR . . .

## *Linde* serves the nation's railroads

Through the years, LINDE Representatives and railroad men have worked together as a team to improve methods of road maintenance, equipment repair, and shop fabrication. And this teamwork has paid off. For today—in yards, shops, and along the right of way—LINDE's modern metalworking processes are helping railroads maintain efficiency and modernize for the future . . . at minimum cost.

Whatever your fabrication, repair, or maintenance needs may be, LINDE's unmatched engineering facilities and dependable apparatus will meet them exactly. Get complete details on modern electric welding, oxy-acetylene welding and cutting, flame-hardening, and continuous rail welding. Call your nearby LINDE Representative today!

Oxy-acetylene cutting



HELIARC welding

RAILROAD DEPARTMENT

**LINDE COMPANY** DIVISION OF UNION CARBIDE CORPORATION

In Canada: LINDE COMPANY, Division of Union Carbide Canada Limited, Toronto

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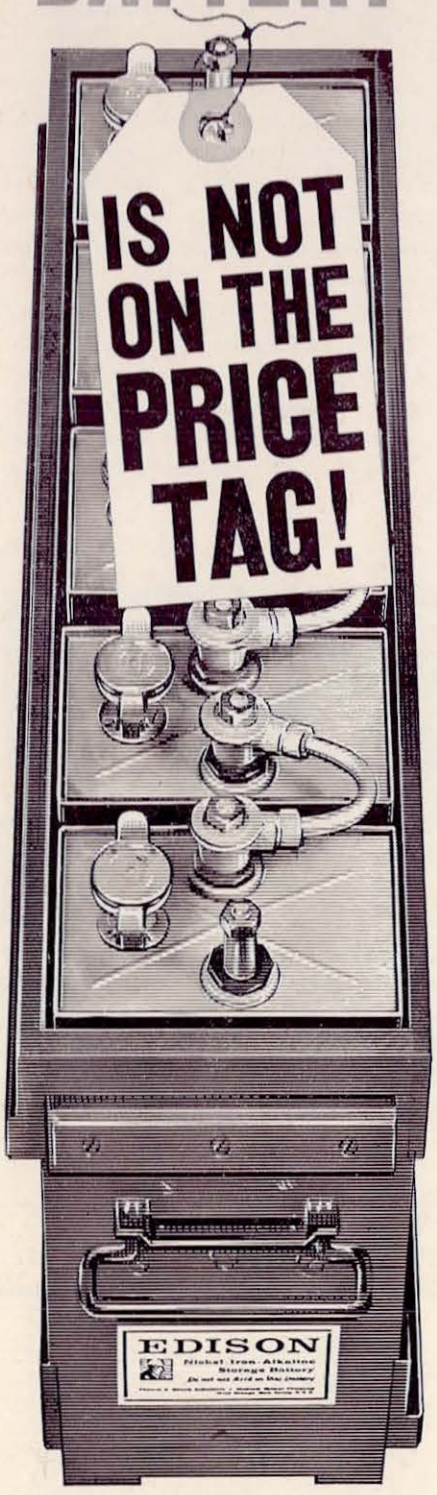
# THE COST OF YOUR BATTERY




**Don't be fooled by lower prices.** The **true cost** of your battery depends on many factors like life of the battery and dependability. EDISON'S price tag **is** higher, but you will find its **cost** is lower, **much lower.** See for yourself. Send for EDISON'S "Extra Dividends" booklet today. Write Storage Battery Division, Thomas A. Edison Industries, West Orange, N. J. In Canada: International Equipment Co., Ltd., 90 Bates Road, Montreal, P. Q.

**COMPARE EDISON**
**THE HIGHER PRICED BATTERY THAT COSTS LESS**

Get these benefits by using EDISON for car lighting, air conditioning, industrial trucks, communications, signalling, multiple-unit controls.

1. Longer life—lower depreciation
2. Durable, all-steel construction
3. Dependable—no sudden failures
4. Reduces maintenance cost
5. Fully flexible charging characteristics
6. No corrosive fumes
7. Lowers cost of operation
8. Can stand idle indefinitely
9. Withstands temperature extremes
10. Other uses after heavy duty life
11. Lighter weight
12. Edison Nationwide Service

# EDISON NICKEL-ALKALINE STORAGE BATTERIES

*Another Product of* McGRAW EDISON


## N. Y. RAIL AID PLAN

*(Continued from page 10)*

is defined by New York law as a "redevelopment corporation" and already enjoys some of the benefits the Purcell plan foresees, called the program a step forward for commuters although it seemed to have little application to Long Island's special problems.

DL&W President Perry Shoemaker, whose New Jersey commuter lines would not be directly affected by the proposed legislation, wired Governor Rockefeller: "You are to be commended on having selected a transportation group of the qualification and competence shown by the Purcell Report."

C. A. Major, Lehigh Valley president, called the proposals "a constructive step in the direction of assuring a railroad plant for New York State adequate for the needs of the public." Some of the proposals, he said, notably those relating to tax adjustments, would help the Lehigh Valley, although they are not a cure to all its troubles.

Harry W. Von Willer, president of the Erie, praised the Purcell proposals as a "progressive and intelligent approach" that "could well be the basis for a first step toward a constructive solution."

Boston & Maine President P. B. McGinnis hailed the Purcell plan as "wonderful news." "It's the first good thing the State of New York has done for the railroads in 50 years," he said.

As for Boston's own commuter problems, Mr. McGinnis, like Mr. Alpert, feels that some kind of tax relief would certainly help. But the B&M, he points out, would derive no great benefits from any government-financed equipment leasing agency, because the average age of its passenger cars, as a result of its Budd RDC program, is only about 2.5 years.

Outside the New York and Boston commuter areas, other cities are proceeding with their own approach to commuter problems. Philadelphia, which has a less serious tax problem than the New York-New Jersey area, is continuing its experiment in bringing riders back to the rails with city-aided improvements in schedules and fares (RA, Oct. 27, 1958, p. 82).

The Chicago area stands by its own tax-equalization plan now before the Illinois Mass Transport Commission (RA, Feb. 2, p. 18). In San Francisco, a spokesman for the Southern Pacific commented that the Purcell proposals for equipment leasing and full-crew law relief seemed to apply largely to conditions prevailing in New York. "However, we do feel that intelligent tax relief is an integral part of any solution to the commuter problem," he said. Montreal is currently arguing a substantial fare increase proposal.

# 'Control Authority' Proposed

BAR president advances plan for control of railroad service standards and efficient routing of interline traffic.

► **The Story at a Glance: Bangor & Aroostook President W. Gordon Robertson last week proposed an industry-wide "Control Authority" that would:**

- **Police railroad standards of service on an interline basis.**
- **Prescribe "the most economic and expeditious" routes for traffic.**

**Mr. Robertson made the proposal in an address before the New York Railroad Club in New York City. Other speakers—Norfolk & Western President Stuart T. Saunders; Pittsburgh & West Virginia President R. N. Shields; Erie President H. W. Von Willer—dealt at length with service and pricing problems confronting the industry today.**

One overriding theme emerged at the annual Presidents' Night meeting of the New York Railroad Club: the need for railroads to throw away old ideas of pricing and service, and adopt new ones to keep pace with swiftly-changing conditions.

The service aspect was emphasized in BAR President Robertson's proposal for a central "Control Authority."

"As matters now stand," said Mr. Robertson, "each of us pretty much sets his own quality standards and his own controls. . . . [But] since a fairly large percentage of railroad tonnage does involve two or more lines, it seems obvious to me that quality and its control is not a problem for Line A and Line B and Line C as individuals but a common problem which calls for an industry-wide solution. . .

"I visualize a Control Authority subscribed to by all railroads and assigned the duty of maintaining quality transportation standards. . .

"As a matter of routine, it would continually sample the kind of performance being offered and, in addition, investigate complaints and requests of shippers.

"It would have sufficient power to correct practices that do not meet quality standards. It would have the power to determine the most economic and expeditious method of handling shipments and to see to it that this method was utilized.

"Presumably this could result in cases whereby some railroad would get a shorter haul than it previously enjoyed with a consequent loss in revenue. Certainly this is a tough problem, but I do not think it unsoluble. I say this because surely it is possible to establish an accounting system not unlike that used by a clearing house which would adjust such losses to manageable proportions."

He said he had submitted the idea to New England railroad presidents but "the problem it seeks to solve . . . is nation-wide."

The goal of such a plan, said Mr. Robertson, is to "offer nothing but the best of service to our customers no matter where they may ship. . ." He said "an investment in high standards and their control might well yield an even higher return than our investment in new technologies."

N&W President Saunders underscored the importance of cost control. His thesis:

"Under the impetus of the new Transportation Act, the ICC is moving toward greater recognition of cost as the predominant factor in competitive ratemaking. . .

"We must see to it that we remain the low-cost carrier. . .

"We must sharpen our cost tools and constantly strive to improve cost-finding techniques so that we can establish that we are the low-cost carrier. No longer can we take the position that it is impossible to determine the cost of transporting various commodities. Not only is it possible, it is absolutely essential. . .

"We must be willing to construct rates on the basis of the cost we determine. . ."

### *Electronic Equipment*

Mr. Saunders said opportunities for improved cost control are to be found particularly in "the use of electronic equipment to accomplish the vast amount of paper work required in all large organizations" and in the correction of featherbedding abuses.

He listed cost control as one of "two vital areas in which railroad management has virtually unlimited opportunities for strengthening the industry." The other area: better service.

"The shipping public wants fast, as well as low-cost, service, and we must satisfy that demand," he said. "Recently, considerable progress has been made in reducing the transit time of freight shipments. . . Much remains to be done, particularly in providing better freight schedules with some of the certainty characteristic of present passenger schedules. Particularly helpful in this regard will be greater coordination of facilities and operations and more frequent mergers of individual railroad companies."

Erie President Von Willer called for bold pricing experiments, declaring that "proper marketing research, coupled with detailed cost ascertainment . . . is the hope of the railroad industry in 1959 and the future."

"Until the basic economic data necessary to make proper pricing decisions can be developed, and until we upset some of the 'sacred cows' of our historical pricing policies, we will make very little progress," he asserted. "The products of [market research] must be weighed and tested by those of us who have an experienced and practical background. But those who make the final decisions must show real imagination—a willingness to change their basic thinking—a willingness to experiment."

P&WV President Shields took a specific market where the railroads have lost ground to their competitors, and suggested that they might recover the lost ground with rates and service tailored to shipper needs.

The market: movement of flat rolled steel.

This market has produced potential transportation revenues of $273,000,000 in each of the last four years, said Mr. Shields. But "out of this tremendous potential the railroads are handling only about 15%—or only $41,000,000; trucks are getting $232,000,000."

He said that during the 1950-57 boom, "there was such a demand for transportation equipment that loads were available for every empty car the railroads could supply regardless of the condition of the car. . . Under such conditions it is easy to understand why the railroads became complacent and failed to recognize that the truckers were providing a cheaper, better and more reliable service.

Now, he said, to hold the traffic they still have, and to recapture lost traffic, railroads must provide "a dependable service in special equipment at a cost to the customer lower than if he used truck transportation.

"Rates must be reduced to the point where the overall cost to the customer when shipping via rail will be lower than the trucks can possibly meet. . ."

# Common Language Waybill?

Railway Systems & Procedures Association, meeting in Chicago, hears reports on efforts to develop uniform waybills and train consists. Standardized paperwork could mean tremendous savings.

**The Story at a Glance: Cost reduction through paperwork simplification was the principal theme of the Railway Systems & Procedures Association meeting in Chicago last week.**

**Two main topics of discussion were uniform waybills and uniform train consists.**

**T. F. Schaekel, the Pennsylvania's manager, car service records, underscored the importance of the "paperwork" revolution during a discussion of standard waybills:**

**"All of us realize that at present the cheapest clerical work that can be obtained costs five cents a minute. Can we afford to be throwing these nickels away, copying and recopying redundant information that appears on the waybill when it would be possible to create it in a common language form and transmit the record of the car movement mechanically?"**

One important RSPA workshop has sought to develop a common language waybill, a document sensible both to the eye and to common language business machines.

W. C. Wallace, auditor freight receipts, Chicago & North Western, discussed the basic nature of the waybill, and described a major barrier to satisfactory interchange: the lack of uniform abbreviations and station codes.

Adaptability of existing electromechanical machines to process and forward waybill information was discussed by T. E. Drury, assistant to general auditor, Rock Island. He pointed out that the one item common to all existing communications systems is the five-channel punched tape.

L. P. Froio, office manager, car service records, PRR, described a system now under test by his road. The common denominator in this system is the five-channel punched tape and Teletypewriter transmission. One typing produces a waybill, freight bill, train consist, wheel report, interchange report, tapes to produce cards for station accounting, car accounting and sales and service statistics. PRR claims it is a feasible and practical plan of automatic reproduction of transportation information from one report to another, from one place to another, and, some day, perhaps, from one railroad to another. This is a common language system—common to men and machines.

H. F. Lorriman, methods manager, revenues, Canadian National, suggested that the present waybill may be overworked. He proposed three punched card forms to be carried with the train: (1) for weighing en route; (2) for diversion or partial unloading and to carry junction stamps; and (3) for additional charges such as icing, etc. All other information would go "overhead" by some communications system.

### *Uniform Train Consist*

The main objective here was to establish a compatible means of exchanging pertinent train consist and waybill information covering interline carload shipments interchanged between representative lines. A road originating a carload of freight can arrange to type this information only once, simultaneously making a punched tape, punched card, or magnetic tape. The information is mechanically reproduced as the car moves from terminal to terminal, and passed to the connecting line as the car is interchanged.

The train consist is transmitted from yard to yard and reproduced mechanically in the yard and central offices. All necessary information is available to produce the following reports: (1) switch list; (2) conductor's wheel report —with departure and arrival time, train identification and mileage cut into a master and gang-punched into the individual car cards; (3) standard interchange report—with time and place of interchange rubber-stamped onto the form; and (4) traffic office reports for car tracing. Other reports can be developed as desired.

Teletype is limited to 72 characters per line and punched cards to 80 columns, requiring all information to be condensed to these limitations. It was determined that 20 items were required on the complete waybill. It is essential that each road maintain certain information which is local and useless for exchange purposes. No less than 29 spaces are required for local use. It was thus necessary to use two Teletypewriter lines or two punched cards. A third card or extra lines would be required for special instructions.

A great deal of study was devoted to the sequence and size of field. Some items were well defined as to the size of field required; for instance, six spaces for the car number. Others, such as origin and destination cities, consignee, and consignor demanded considerable investigation. For these four a rule for condensing was recommended. A rule was considered more desirable than an abbreviation as the latter requires a checklist for accurate interpretation, whereas a rule can be universally applied.

This uniform consist resulted from the studies of two groups formed independently, then pooling their results. One group was a sub-committee of the

### 'Epoch-Making' Step

**Three major railroads are demonstrating this week how data processing equipment, if it's compatible, can be used to solve huge paperwork problems involving more than one road.**

**The three roads—Illinois Central, Union Pacific and Southern—are settling their interline freight accounts through the exchange of only two items: the check, and a roll of magnetic tape. IC calls it an "epoch-making step" in accounting simplification.**

**The magnetic tape replaces the large stacks of interline abstract sheets hitherto exchanged between these roads each month.**

**In the new procedure, the information on the tapes will be fed into large-scale data processing machines used by the receiving railroad. A large volume of accounting work will be automatically audited and verified. Result: mistakes will be minimized, and the entire accounting process speeded.**

**The top accounting officers of the three roads involved—F. E. Martin, IC's vice president and comptroller; R. M. Sutton, UP's vice president and general auditor; and R. B. Curry, Southern's comptroller—were to meet in Chicago this week for the first exchange of tapes.**

Eastern Railroad Presidents Conference with representatives of the Baltimore & Ohio, Boston & Maine, Erie, New York Central, New Haven, Pennsylvania, Reading and Western Maryland. The other was the Systems and Procedures Coordination Committee with representatives of the Atlantic Coast Line, L&N, RF&P, the Clinchfield, Charleston & Western Carolina, Atlanta & West Point, Western of Alabama, and Georgia. The RSPA panel that presented this report consisted of A. J. Connell, director, methods and research, B&M; J. L. Lonon, trainmaster, Clinchfield; Jack Small, assistant superintendent of transportation, L&N; and T. F. Schaekel, manager, car service records, PRR.

The ERPC has presented its report to an AAR committee headed by P. J. Kendall, vice president and general auditor, Southern Pacific, for further study. The southeastern railroad group is proceeding with the adoption of the uniform train consist, and the L&N is already training its employees to that end.

### *Interchange Consists*

The PRR has a pilot installation at Columbus, Ohio, where interchange reports are transmitted to the C&O via uniform train consist. The PRR connects with four railroads at Columbus at 10 locations. Interchange reports have in the past been manually prepared at each of these 10 points.

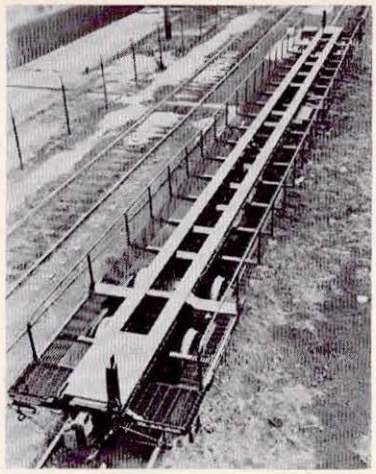
Now, the train consist is teletyped to a central office in Columbus. Here the train consist is received in the form of a punched tape, which is fed into a tape-to-card machine to produce a punched card for each car interchanged. By using a reproducing punch a new punched card is made following the uniform train consist format. These new cards are fed into a card-to-tape punch to prepare a tape. This tape is transmitted to the C&O. This interchange information is received in the form of a punched tape by the C&O.

According to W. R. Gunter, supervisor, transportation engineering, PRR, the pilot installation has produced monetary savings—since instead of interchange reports being manually written at 10 locations, they are now prepared by one person at the central location.

### *Car Utilization*

A by-product of the use of the uniform train consist is a determination of car utilization. Analyzing train consist information, R. H. Hamilton, assistant to superintendent, commuter applications, C&O, reported that his road is making a study of about 10,000 special cars. Based upon car movement data supplied by the C&O's Car Location Information Center (CLIC), the loads per car used are determined. That is, C&O studies the routes and mileage a car takes loaded and empty and the time involved in these moves.

Results of this car movement analysis indicate that car handling degenerates as the available car supply increases in relation to car demand. If no other use can be made of the surplus cars as loadings decrease, storage of cars makes it possible to defer maintenance. This also reduces the car supply available for revenue service, cutting car handling expense. Car performance can be improved by matching car movement data concerning empties with car orders.



## New Clejan Car

Longer Clejan piggyback cars being delivered to Southern Pacific by General American will handle two 40-ft trailers or containers. New 85-ft model is 5½ ft longer than previous Clejans and has light weight of 50,000 lb. SP Clejan fleet will total 250 cars when this 150-car order is completed.

### *Streamlined Ore Waybilling*

The Western Maryland has installed a mechanized procedure for preparing waybills for ore moving out from the WM docks at Port Covington in Baltimore, Md. The new system, according to R. C. Urich, Jr., procedures analyst, WM, is both faster and more reliable, and substitutes mechanical repetition for hand copying. Chance of error is virtually eliminated since all data is preserved in punched paper tape. Also, ore trains now depart more promptly. (RA, Oct. 6, 1958, p. 27.)

The Bessemer & Lake Erie is using mechanized means to prepare a simplified form of waybill at its Conneaut, Ohio, ore terminal. Here, ore is transferred from lake boat to railway car. Information common to all waybills, such as shipper, routing, origin, etc., is put on punch tape. The tape actuates an electric typewriter to type the information on the waybill. Variable information such as car initial and number, and weight (net and gross tons), is typed by the operator.

W. M. Hawkins, supervisor of revenue accounting, B&LE, said this mechanized procedure with a simplified waybill considerably reduces the time required for waybill preparation. Billing information can be mechanically prepared from this waybill. This has benefitted the railroad and the consignee. One consignee has reduced his personnel by 34 as a result of this streamlined waybilling.

### *Freight Car Identification*

A new electronic system which identifies the individual freight car numbers of a fast-moving train permits local or centralized recording and processing. C. A. Donze, Jr., director of market research, Link Aviation, Inc., said that this new Link tracer identification control system consists of a wayside interrogator and associated coil which is installed along the railroad tracks at key points. The coil provides an electro-magnetic interrogation signal. A Link response block, about the size of a billfold, is fastened underneath the freight car. As the car passes over the interrogator coil, the response block is actuated and returns an electronic signal which is converted into the specific car number.

This car identification takes place in a fraction of a second as the train passes over the coil at speeds up to 100 mph. The car number or electronic signal can be relayed by wire or radio to the yardmaster's office or the railroad's data processing center.

It would cost around $80,000,000 to equip all freight cars on the railroads, according to George Hudson, president, Western Railroad Supply Co., sales representatives for this system. He predicted that such an expenditure would pay for itself in two years through the reduction in personnel for car checking purposes. It will cost from $10 to $50 to equip each freight car with a response block, and the wayside interrogation equipment runs from $5,000 to $10,000.

A featured speaker at the RSPA meeting was Clair Roddewig, president of the Association of Western Railways. He warned that government subsidies, if accepted by the railroads, might start the industry on a "short cut" to government ownership. He expressed the belief that subsidies would create more problems than they would solve for railroads.

Music and fun in the children's ward —on Junior Red Cross Visiting Day.

# One "Youth Gang" we need more of...

Rock 'n rollers? That's right. *Rock 'n rollers in a children's hospital.*

The three "gang members" are Junior Red Cross members who've taken an afternoon of their time to go to the hospital and entertain some little crippled kids. Reassuring, isn't it?

They do things like this all the time. Regularly. Girls and boys.

*20 million of our sons and daughters* make up Junior Red Cross—the largest youth organization in the country. Junior members take part in every one of the Red Cross service programs that young people can help to carry on.

*When disasters hit,* Junior Red Cross volunteers help in many ways—as messengers, typists, canteen workers, information clerks. Many Junior Red Cross members have served with real distinction in disaster emergencies.

*Through the Gift Box Program* in their schools, Juniors send relief supplies to children overseas. Like all Junior Red Cross activities, this program is financed entirely by the Juniors themselves.

*Friendship between children all over the world* is fostered by the Junior Red Cross correspondence-album and art programs.

Junior Red Cross is at work every day, helping to build a strong, decent, responsible young America.

These are kids we don't have to worry about. Let's be sure they know they can depend on *us.*

Join +

## On the job when you need it most

# MARKET OUTLOOK *at a glance*

## Carloadings Drop 0.1% Below Previous Week's

Loadings of revenue freight in the week ended Mar. 14 totaled 595,302 cars, the Association of American Railroads announced on Mar. 19. This was a decrease of 628 cars, or 0.1%, compared with the previous week; an increase of 56,175 cars, of 10.4%, compared with the corresponding week last year; and a decrease of 93,924 cars, or 13.6%, compared with the equivalent 1957 week.

Loadings of revenue freight for the week ended March 7 totaled 595,930 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, March 7

| District | 1959 | 1958 | 1957 |
|---|---|---|---|
| Eastern | 94,261 | 85,788 | 115,833 |
| Allegheny | 112,013 | 95,247 | 135,651 |
| Pocahontas | 49,876 | 48,866 | 62,763 |
| Southern | 112,416 | 111,171 | 120,453 |
| Northwestern | 64,457 | 57,645 | 75,412 |
| Central Western | 113,733 | 98,561 | 111,421 |
| Southwestern | 49,174 | 47,096 | 50,830 |
| Total Western Districts | 227,364 | 203,302 | 237,663 |
| Total All Roads | 595,930 | 544,374 | 672,363 |
| Commodities: | | | |
| Grain and grain products | 52,478 | 44,952 | 54,324 |
| Livestock | 4,074 | 4,447 | 5,736 |
| Coal | 103,111 | 110,926 | 131,448 |
| Coke | 10,980 | 6,095 | 13,233 |
| Forest Products | 39,231 | 34,934 | 39,426 |
| Ore | 17,106 | 15,116 | 23,433 |
| Merchandise l.c.l. | 45,090 | 47,720 | 58,026 |
| Miscellaneous | 323,860 | 280,184 | 346,737 |
| March 7 | 595,930 | 544,374 | 672,363 |
| Feb. 28 | 575,583 | 551,192 | 703,983 |
| Feb. 21 | 583,181 | 494,919 | 626,630 |
| Feb. 14 | 567,134 | 533,186 | 675,966 |
| Feb. 7 | 565,397 | 532,396 | 665,251 |
| Cumulative total, 10 weeks | 5,629,451 | 5,372,664 | 6,557,146 |

**PIGGYBACK CARLOADINGS.**—U. S. piggyback loadings for the week ended Mar. 7 totaled 7,772 cars, compared with 4,713 for the corresponding 1958 week. Loadings for 1959 up to Mar. 7 totaled 66,284 cars, compared with 44,069 for the corresponding period of 1958.

**IN CANADA.** — Carloadings for the seven-day period ended March 7 totaled 66,441 cars, compared with 66,137 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

| | Revenue Cars Loaded | Total Cars Rec'd from Connections |
|---|---|---|
| Totals for Canada: | | |
| March 7, 1959 | 66,441 | 30,005 |
| March 7, 1958 | 65,806 | 32,628 |
| Cumulative Totals: | | |
| March 7, 1959 | 610,724 | 257,467 |
| March 7, 1958 | 617,168 | 277,382 |

# New Equipment

► *Last Week's Orders.*—Orders for new equipment costing approximately $21,500,000 were reported to Railway Age in the past seven days. The breakdown:

**FREIGHT-TRAIN CARS**

► *Baltimore & Ohio.*—Ordered 1,000 cars from company shops at DuBois, Pa. Work starts this month on 500 50-ton, 33-ft hopper cars to be completed in May. Work will begin in May on 500 70-ton, 52-ft 6-in. gondolas.

► *Canadian National.*—Ordered 400 46-ft steel piggyback flat cars from National Steel Car Corp. Delivery is expected to be completed by August.

► *Chicago Great Western.*—Purchased 10 70-ton, 3,219-cu ft capacity covered hopper cars from Pullman-Standard at a total cost of $121,500.

► *Rock Island.*—Will lease 100 85-ft piggyback flat cars from North American Car Corp., which will buy the cars from Pullman-Standard Car Manufacturing Company (RA, Mar. 16, p. 39).

**LOCOMOTIVES**

► *Santa Fe.*—Ordered 24 diesel locomotives: 15 2,400-hp SD-24 turbosupercharged units from Electro-Motive Division of General Motors, and 9 2,400-hp DL600B units from Alco.

► *Texas & Pacific.*—Ordered 8 1,750-hp GP-9 locomotives from Electro-Motive Division, General Motors, for delivery in May.

# Orders and Deliveries

► *Deliveries Increase.*—Orders were placed in February for 1,806 new freight cars, compared with 4,007 in January. Freight cars ordered in February 1958 totaled 287. Deliveries in February totaled 2,486, compared with 1,940 in January and 5,316 in February 1958. The backlog of cars on order and undelivered as of Mar. 1, 1959, was 28,789, compared with 29,470 on February 1 and 43,750 a year ago.

| *Type* | *Ordered February, 1959* | *Delivered February, 1959* | *Undelivered March 1, 1959* |
|---|---|---|---|
| Box—Plain | 588 | 355 | 10,881 |
| Box—Auto | 0 | 0 | 500 |
| Flat | 13 | 264 | 1,498 |
| Gondola | 35 | 191 | 2,290 |
| Hopper | 500 | 1,201 | 10,683 |
| Cov. Hopper | 413 | 120 | 795 |
| Refrigerator | 1 | 171 | 1,030 |
| Stock | 0 | 0 | 0 |
| Tank | 256 | 176 | 800 |
| Caboose | 0 | 8 | 130 |
| Other | 0 | 0 | 182 |
| Total | 1,806 | 2,486 | 28,789 |
| Car Builders | 1,295 | 1,657 | 8,085 |
| Railroad Shops | 511 | 829 | 20,704 |

a RAILWAY AGE time-saver page

E. Frank Reed
B&M

James C. Nagle
B&M

Robert E. Thomas
M-K-T

Ray H. Smith
Soo Line

# People in the News

**BOSTON & MAINE.**—**E. Frank Reed,** manager, real estate and industrial department, Boston, appointed vice president—industrial development.

**James C. Nagle,** general freight agent of the **New Haven** at Boston, Mass., has resigned from that position to become regional sales manager, freight traffic department, B&M, Boston.

**FRISCO.**—**H. C. Barnett** appointed assistant supervisor, trailer on flat car, Springfield, Mo.

**R. E. Catlett** appointed division engineer, Red River division, Fort Worth, Tex.

**KANSAS CITY SOUTHERN.**—**Paul S. Rhoads** named merchandise traffic manager, Shreveport, La., to replace **John P. Gunther,** assistant freight traffic manager, deceased.

**P. M. Caraway, Jr.** appointed assistant general passenger agent, Shreveport, La.

**MISSOURI-KANSAS-TEXAS.**—**Robert E. Thomas,** chairman, executive committee, M-K-T, and vice president, Madison Fund, Inc., resigned March 16 from Madison Fund in order to devote full time to the affairs of the Katy. Mr. Thomas will maintain headquarters at New York and Dallas, Tex. He will devote his time not only to financial and general policy matters, but also to pursuing studies and plans in connection with an LPG pipeline project being developed jointly by the Katy and the New York Central.

**QUANAH, ACME & PACIFIC.**—**S. J. Henderson** appointed general agent, Quanah, Tex.

**SOO LINE.**—Effective Feb. 16, **Ray H. Smith,** assistant general traffic manager, Pillsbury Company, appointed freight traffic manager in charge of rates, Soo Line, Minneapolis, to succeed **H. J. McKenna,** resigned.

**John A. Sledz** appointed assistant to freight traffic manager-rates.

**SPOKANE INTERNATIONAL.**—**J. R. MacAnally,** appointed general freight traffic manager, Omaha, Neb. **K. G. Carlson** named freight traffic manager, Omaha. **C. W. Evers** appointed traffic manager, Portland, Ore.

**TEXAS & NEW ORLEANS.**—**R. F. Davis,** auditor, Houston, Tex., retired Feb. 28 after 46 years' service.

**Roland de Waal,** general manager, Houston, retires Mar. 31 after 46 years' railroad service.

**A. R. Mielly,** industrial commissioner, Houston, retires Mar. 31.

## OBITUARY

**Thomas C. Cashen,** 79, retired international president, **Switchmen's Union of North America,** died Mar. 4 at his home in Skokie, Ill.

**James A. Anderson,** member, Second Division, **National Railroad Adjustment Board,** died Feb. 6 at Evanston Hospital, Evanston, Ill.

# Supply Trade

**Harold L. Folley** has been appointed signal engineer of **Western Railroad Supply Company,** division of Western Industries, Inc., Chicago, succeeding **Thomas H. Kearton,** who retired Dec. 1. Mr. Folley was formerly engineer telephone, telegraph and signals of the Chicago & Eastern Illinois.

**Charles C. Libby,** manager of the Electrical Department of the Fair Lawn, N. J. branch of **Fairbanks, Morse & Company,** has been appointed manager of the Electrical Division, Freeport, Ill., to replace **W. H. Kingsley,** resigned.

**Frederick H. Eaton** has joined the **Rail & Industrial Equipment Co., Inc.,** 30 Church Street, New York, as sales and production manager. Mr. Eaton was formerly with American Car & Foundry Division, New York.

**Jack I. Levy** has been elected a director, vice president and general counsel, **General American Transportation Corporation,** to succeed **Milton G. Manasee,** deceased. Mr. Levy was formerly associated with the law firm of **Sonnenschein Lautmann Levinson Rieser Carlin & Nath.**

**Karl M. Kline,** railway sales manager of **Line Materials Industries, McGraw-Edison Co.,** has retired.

## OBITUARY

**E. A. Carlson,** railroad sales manager of **Simplex Wire & Cable Company,** died recently.

**John D. Ristine, Sr.,** 77, executive secretary of the **Allied Railway Supply Association, Inc.,** for the past two years, died in St. Francis Hospital, Evanston, on March 2. Mr. Ristine was vice-president and assistant to the president of the Grip Nut Co., for ten years prior to his retirement in 1952. He also served as representative for the Cardwell-Westinghouse Co., and the Standard Car Truck Co.


*All of these Shares having been sold, this advertisement appears as a matter of record only.*

NOT A NEW ISSUE

March 3, 1959

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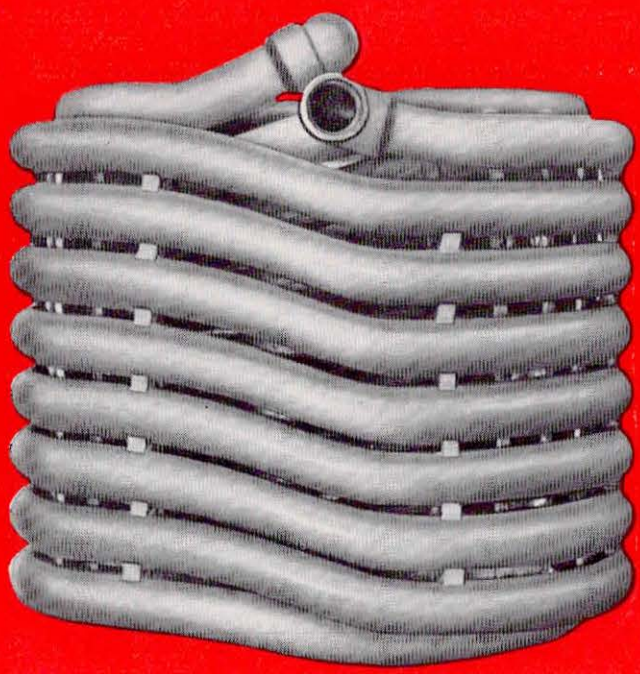
*(Nickel Plate)*

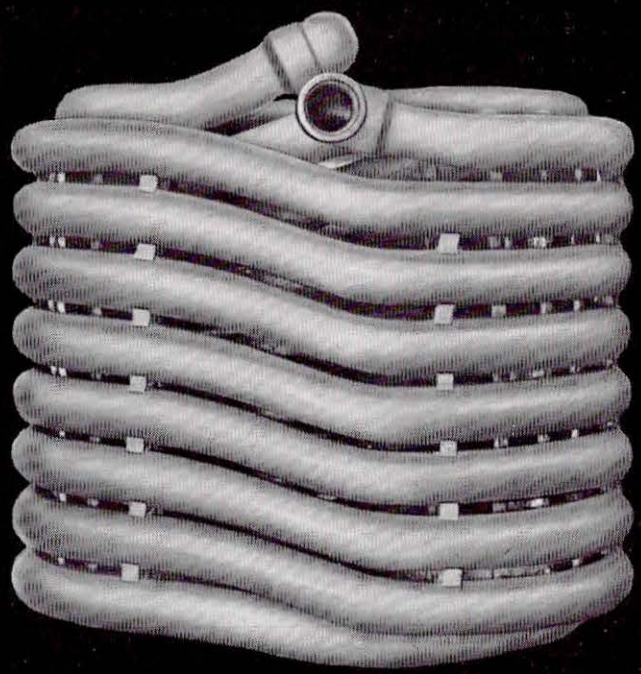
Common Stock

**Merrill Lynch, Pierce, Fenner & Smith**

Incorporated

# these two coils may "look alike," but service records prove they're not!





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# VAPOR TURBO-TUBE

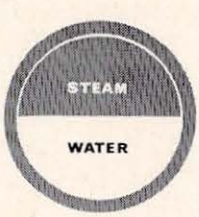
### *when you're buying* STEAM GENERATOR PERFORMANCE

***You always get better heat-transfer and longer service from Turbo-Tube coils made by Vapor.***

**FIRST,** because Turbo-Tube tubing is *electric resistance welded* (not tube that's butt-welded or seamless). Thus, wall thickness and physical properties can be accurately controlled for uniformity...interior and exterior surfaces are extremely smooth... there are virtually no pits, cracks, or scabs at the seam where corrosion can get started...and *electric resistance welding* is unaffected by acid cleaning during blow-downs.

**SECOND,** because the inner circumference of Turbo-Tube is not plain but *spirally rifled* to swirl the flow of water and vapor into a same-temperature, uniform mixture. Water that otherwise would collect at bottom of tube is lifted to "wipe" the side walls for more effective heat absorption that reduces wall temperatures by as much as 400°F. This prevents harmful expansion-contraction that jeopardizes tube life.

When you buy Vapor Steam Generators, you know the hidden parts are designed and made to deliver outstanding performance, and that's true for Turbo-Tube, too. The higher efficiency and longer coil life cut costs, save time...stop waste!




In conventional smooth-bore tube, water and steam separate. Temperature at bottom of tube is much cooler than at top.

In Turbo-Tube, swirling action mixes steam and water—keeps water in constant contact with entire tube inner-circumference.

VAPOR TURBO TUBE

PBI MEMBER

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A top manufacturing supplier to the railway and railway freight car industry is seeking a sales representative. The ideal man would be 35-40 having a mechanical engineering degree or equivalent in experience. He should have a proven working knowledge of railway freight car design and construction acquired with a railroad, car builder or supplier. Sales experience is desirable, but strong aptitude will qualify. Excellent oportunity for advancement. Write, giving full particulars to Box 879, RAILWAY AGE, 30 Church Street, New York 7, N. Y.

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Medium size Chicago manufacturer of railroad equipment requires graduate Mechanical Engineer for development and supervisory control. Minimum five to eight years' experience in heavy equipment design, and managerial ability desired. Permanent position; salary open. Detailed resume required and will be treated in confidence. Box 1623, RAILWAY AGE, 79 W. Monroe Street, Chicago 3, Illinois.

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**The Strasburg Railroad has a home for a light steam locomotive, std. gauge, 70 T. max., 20° curve radius, preferably in serviceable condition. Write Mr. Donald Hallock, VP-GM, Box 70, Strasburg, Pa.**


# RI President Urges Rail-Truck Cooperation

Downing B. Jenks, president of the Rock Island, told the Western Railway Club in Chicago that he'd like to see an organization composed of the railroads and the "large, reliable common-carrier truckers" to act collectively on matters of mutual interest. He saw the organization in the role of "trying to settle by conference some of the matters on which we do not agree, rather than before legislators or in the newspapers."

He said: "I think the railroads have spent a lot of time and money trying to make operations difficult and less economic for the truck lines . . . If we devote this amount of energy to working with common-carrier truckers, on matters of mutual interest, we both will be much more successful . . ."

### *Same Problems*

Common-carrier truckers have told him, he said, that they face some of the same problems railroads do. He named rising costs, drainage of traffic by contract and private carriers, and the inability to compete for the haulage of agricultural products because of their exemption from rate regulation. Coordinated rail-truck service which combined the economy of rail long-haul with the flexibility of trucking, and which gave shippers one through billing, could go a long way toward solving those problems, Mr. Jenks said.

He held out a tempting bait: "Common-carrier service by railroad and truck can be made so attractive to shippers that private and contract carriage will lose some of its appeal."

To a degree, Mr. Jenks spoke from experience. Last September, Rock Island established joint rates with Consolidated Freightways between certain points served by the trucker in Minnesota, North Dakota and Wisconsin and points on the Rock Island in ten states. He reported that the arrangement is working out well for both carriers.

### *Standardize Containers Slowly*

Containerization of joint rail-truck operations ultimately will come, Mr. Jenks declared, but he cautioned against attempting to standardize containers too soon:

"We're pretty certain that the operation of lifting a container from a trailer bed to a flat car, or vice versa, will eventually prove to be the most economical method of handling truckload and LTL business. All that remains is to find the best means of making the shift . . . To attempt standardization now, with the application of containers so very limited, would serve no useful purpose."

Rock Island has been using 17-ft containers in its "Convert-A-Frate" operations, and soon will introduce 24-ft units, Mr. Jenks said. And he put on his "other hat," that of president of his railroad's motor-carrier subsidiary, to relate highway length laws to coordinated transport operations in a manner which surprised many in his audience:

"It would be profitable if the regulations of Iowa and Kansas were changed to permit use of longer units raising the length limit from 50-ft to 65-ft so as to permit one tractor to haul two 24-ft trailers behind it. Such an arrangement is easier to handle on the road than a 40-ft trailer, much cheaper to load and unload, and much more flexible for city delivery." Railroads would benefit, he added, through the use of 24-ft containers and skeleton trailers. That size container is more easily handled by crane or lift truck than 35-ft or 40-ft trailers, he pointed out.

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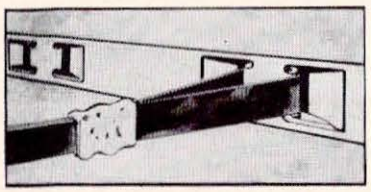

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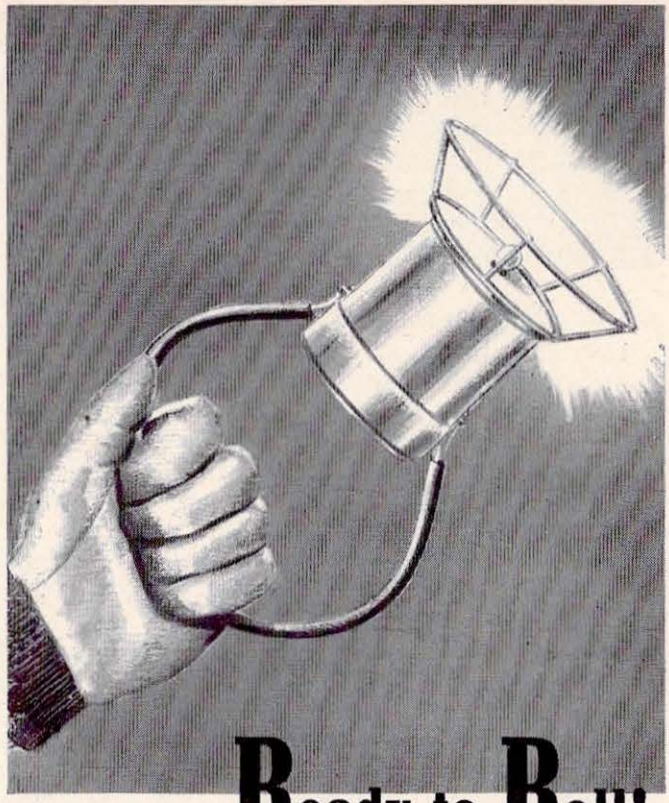

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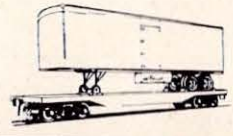

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# You Ought To Know...

**Increased advertising budgets** in newspapers are reported for all segments of the transportation industry in 1958, except for railroads. According to the Bureau of Advertising of the American Newspaper Publishers Association, the railroad investment declined from $6,346,000 in 1957 to $5,800,000 in 1958, down 8.6%. The airlines, on the other hand, increased their expenditures from $24,502,000 to $25,700,000, up 4.9%. Steamship advertising went up 33.8%.

**London's commuter network** is superior to that of New York City, according to a study made by Researcher David Neft for the American Geographical Society. The study blames poor planning and a lack of cooperation between railroads for the deterioration of New York commuter service. The British capital's rail network, says Mr. Neft, has many intersections with transfer points, making it possible to travel from almost any suburban point to almost any point within the city with little difficulty.

**Chicago Tunnel Company's** trustee has asked Federal District Court for leave to petition the ICC for abandonment of the 60-year-old narrow-gage electric railway. Chicago Tunnel once operated 65 miles of subway line with some 117 locomotives and 3,000 freight cars. The court has been asked now for instruction on terminating reorganization proceedings which have been going on since 1956 under Section 77 of the Federal Bankruptcy Act.

**A merger study** being conducted for the Seaboard and the Atlantic Coast Line by two firms of independent consultants is expected to be completed before the end of this year, says Seaboard President John W. Smith.

**Canadian Pacific** has finally won a partial victory in its long fight to break the monopoly heretofore enjoyed by government-owned Trans-Canada Air Lines. It takes the form of approval for Canadian Pacific Air Lines to operate one daily round-trip flight for passengers, mail and freight between Montreal, Toronto, Winnipeg and Vancouver. The authority was granted primarily to allow CPAL to link up its international services to Europe, South America and Australasia, but local service between the four Canadian cities is also permitted.

**B&O's "pushbutton" yard** at Cumberland, Md., may be in operation by year's end. The yard was 35% completed when the recession caused a temporary halt in construction. B&O President Howard E. Simpson says the road now is "hopeful" of bringing the yard into service with the expenditure of $3,500,000 to $4,000,000 this year, on top of the $6,000,000 that has already gone into its construction.

**"Another flagrant example** of the deliberate effort being made by many railroads to kill off their passenger business" is what labor has branded the withdrawal of the NYC and the Pennsy from the Chicago Railways' Hotel Ticket Offices. The words are those of President H. C. Crotty of the Brotherhood of Maintenance of Way Employees.

**The ICC will reconsider** a Railway Express Agency proposal to increase rates on carload shipments by 15%. The proposal, which was rejected last October, will be reconsidered on Apr. 21, together with proposed increased rates on packaged shipments by retail stores that had also been refused last October.

**"Definite recommendations"** will be made within the next few months by the committee studying the proposed merger of the Erie, DL&W, and D&H, according to Erie President Harry W. Von Willer. "We are pleased with the results shown by the studies," says Mr. Von Willer.

**Pennsylvania is changing** position-light signals to have home signals display two red lights in a horizontal row for the Stop aspect. Heretofore these signals displayed three amber lights in a horizontal row. Reason for the change: better visibility.

**Over 50 per cent return** on the investment will be realized by one midwestern railroad on each of over 30 signaling projects approved for this year. Projects include replacing of manual gates and watchmen with automatic gates and flashing-light signals at railroad-highway grade crossings; automatic interlockings replacing attended mechanical or electric interlockings; interlocking consolidations; and installation of centralized traffic control.

**"Judicious Service"** rendered in the Congress of the United States to further the development of a strong and effective national transportation system" has won for Rep. Oren Harris (D.-Ark.) the 1959 Distinguished Service Award of the Washington (D. C.) Chapter of the National Defense Transportation Association. Mr. Harris is chairman of the House Interstate and Foreign Commerce Committee.

**Burlington's "Fast Mail,"** between Chicago and Council Bluffs-Omaha, has marked its 75th anniversary. The all-mail train, a radical concept when introduced in 1884, has become one of the line's most important trains. Burlington has issued a special historical pamphlet telling about the train for the occasion.

**Improving its income tax position** is the P&LE's motive in asking its stockholders to sell to the company up to 100,000 shares, or about 12%, of its common stock. To finance the acquisitions, at prices to be specified by the stockholders, the road proposes to issue bonds. The invitation to sell will be sent to stockholders Apr. 1 and the offer will expire Apr. 30. Tax savings are possible because the interest P&LE will pay on the new debt will be deductible from taxable income.

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Great new improvements offered by Conveyco BUNKER ICING machines are producing tremendous savings in both initial installation and in operating costs for ice companies and railroads.

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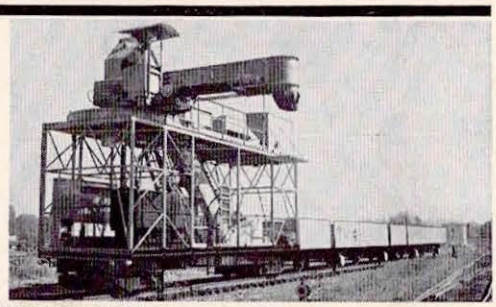
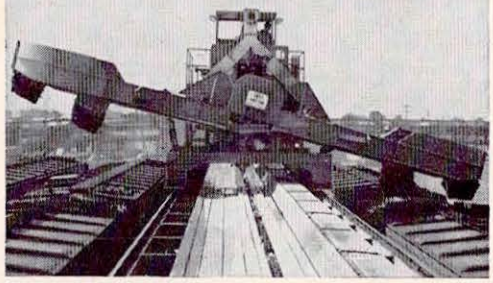


**RAIL MOUNTED ICER**

A complete self-propelled unit that ices refrigerator cars from an adjoining track. Carries own ice supply. Eliminates breaking up of long trains to ice cars. Saves time and money.



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A fast two-man machine with automatic salting unit that ices and salts bunkers simultaneously. Ice is delivered to both hatches of a bunker at same time. Requires lighter dock construction than any other comparable machine — also is faster and more efficient.

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Speeds icing of cars located on sidings or in yards. Saves time of shuttling cars in and out of ice house docks. Also valuable where ice house is far from loading point. Used effectively for icing cold storage bunkers. Owners report savings of as much as 70%.

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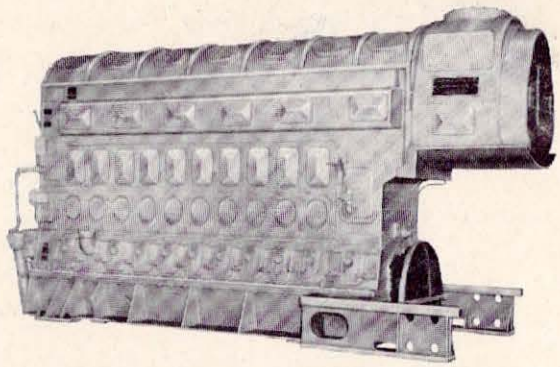

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Meet increased tonnage demands with up-to-the-minute improvements in design and engineering: Upgrade your motive power fleet with Fairbanks-Morse Unit Exchange O-P engines!

F-M Opposed-Piston diesels are rebuilt to exacting factory specifications and are Warranted just as new equipment. You get full advantage of latest developments in diesel power for maximum performance. A 60% increase in F-M Unit Exchange component availability assures prompt delivery—for every O-P rating and major accessory group.

Remember: The only engine better than your present O-P is an Opposed-Piston diesel made better by Fairbanks-Morse. For full details and delivery schedules, write Fairbanks, Morse & Co., 600 South Michigan Avenue, Chicago 5, Illinois.

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# More Net from Heavier Carloads

Increased intensity in the use of railroad facilities is the surest route to higher net earnings. Net railway operating income, without rate increases, almost tripled during World War II (compared to the pre-war average). The reason was the large increase in traffic—with heavier loads per car, and more intensive use of all facilities.

More intensive use of facilities, today, does not come automatically as it does in wartime. Now, it has to be induced. And the logical place to begin to induce it is in the load per car—the box car especially.

•

A little simple arithmetic will show how this works out in a specific instance. For example, in the Western district as of the beginning of 1958 it cost "out of pocket" $153.60 to move a box car 500 mi. with a revenue load of 15 tons—according to the computations of ICC cost finders. It cost $174, or only 13.3% more, to move a load of 30 tons the same distance. The costs per cwt. were 51.2¢ and 29¢, respectively.

Suppose the rate had been $1 per cwt. with a minimum of 15 tons. The railroad would collect $300 for the 500-mi. haul for such a load—with a profit above costs of $146.40, or $9.76 per ton. If, in order to induce the shipper to load more heavily, the railroad were to offer a 30% reduction in the $1 rate for all lading over 15 tons, possibly the load of the car would rise to 30 tons.

In that event the road would collect $510 for moving the car ($300 for the first 15 tons and $210 for the second 15 tons). The profit (earnings above cost) for the movement of the car would be $336—or an increase of approximately 130%. The profit per ton would be $11.20, compared with a $9.76 per-ton profit on the 15-ton load. Meantime, the shipper would be saving 15% on his entire freight bill.

If the railroad were to offer the shipper the inducement of a 50% reduction for all lading over 15 tons, the shipper would pay $450 for the 30 tons; and the profit to the railroad would be $276 for the movement of the car—which would still be $129.60 more than the profit from hauling a load of 15 tons.

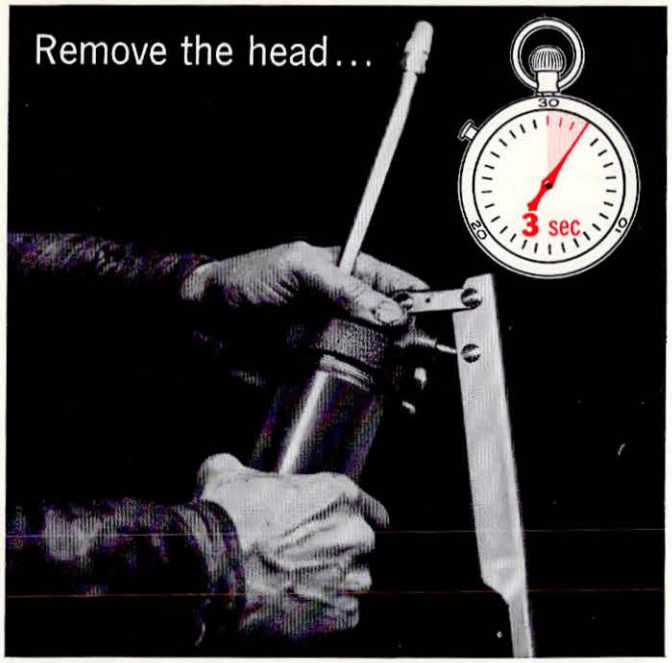
However, with a profit of $276 on a 30-ton load and of $146.40 on a load of 15 tons, the net to the railroad *per ton* would decline to $9.02 for the 30-ton load—fractionally less than the per-ton profit on the 15-ton load.

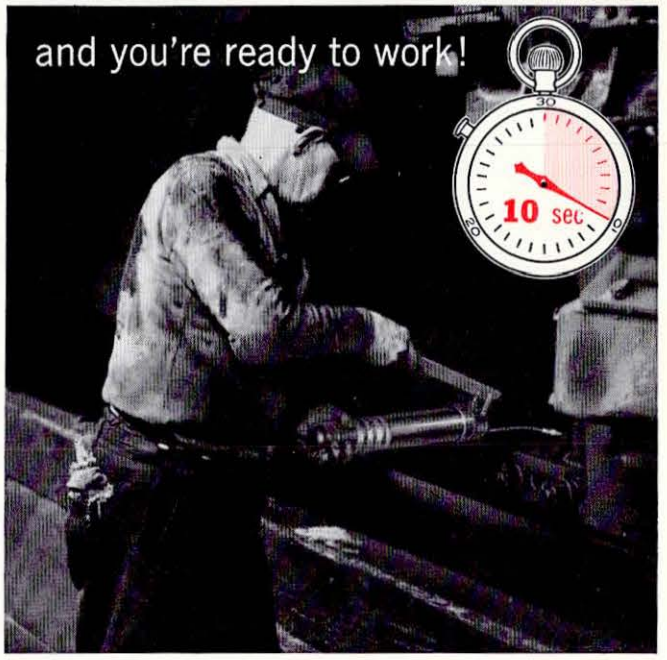
Thus, it would not pay the railroad to make as sharp a reduction as 50% for tonnage above the 15-ton minimum, unless the reduced costs of transportation were going to attract to the rails some tonnage not now moving.

•

The main reason why so many cars—box cars especially—are carrying lighter loads than they could is that the railroads got into the habit of using the box car to compete with the highway trailer. Since 10 or 15 tons is an economical load for a trailer, many carload rates were established with low minimum requirements. Until piggyback service became available, these low minimums for box cars were probably needed. But the piggyback trailer or container gives the answer to the lower truck minimums—and removes the need (and the justification) for box cars hauling only half a load.

**HOW THE UTILITIES GOT RICH:** The electric utilities have for years been holding down their costs and rates and getting more and more business and higher earnings. They have done it, largely, by thinking up ways to induce their customers to help them make more intensive use of existing plant. Similar imagination and effort should be effective for railroads, too.



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Nebula EP 1, extreme pressure grease, in cartridge form is another important product improvement designed to reduce labor costs and give more efficient lubrication of railroad equipment.

Nebula EP 1 in cartridges eliminates wasteful, messy, time-consuming hand loading . . . gives more actual working time. It provides a *full* grease charge every time — no air pockets. And it keeps grease clean . . . avoids contamination from open containers.

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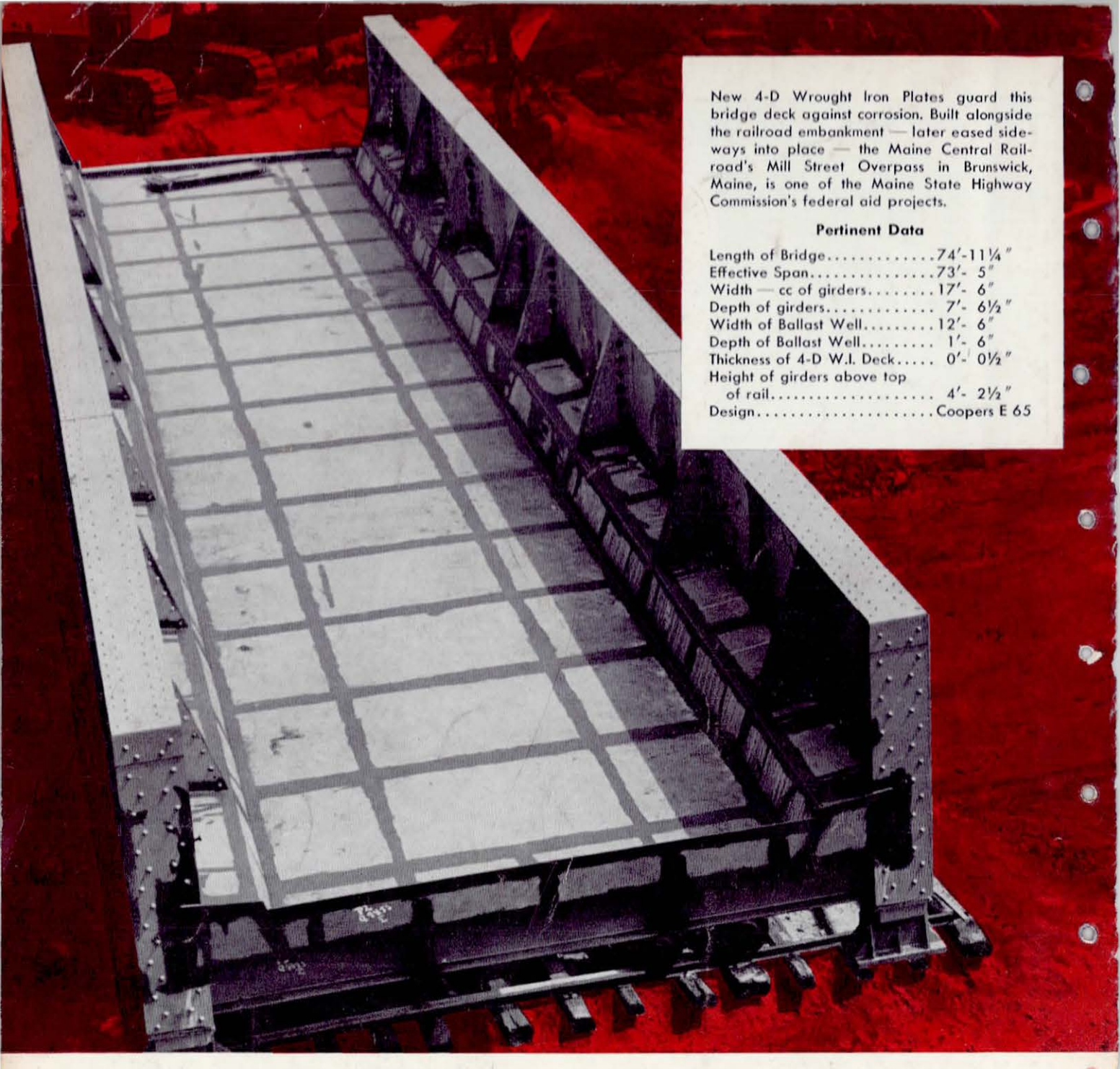

New 4-D Wrought Iron Plates guard this bridge deck against corrosion. Built alongside the railroad embankment — later eased sideways into place — the Maine Central Railroad's Mill Street Overpass in Brunswick, Maine, is one of the Maine State Highway Commission's federal aid projects.

**Pertinent Data**

| | |
|---|---|
| Length of Bridge | 74'-11¼" |
| Effective Span | 73'- 5" |
| Width — cc of girders | 17'- 6" |
| Depth of girders | 7'- 6½" |
| Width of Ballast Well | 12'- 6" |
| Depth of Ballast Well | 1'- 6" |
| Thickness of 4-D W.I. Deck | 0'- 0½" |
| Height of girders above top of rail | 4'- 2½" |
| Design | Coopers E 65 |

# 4-D Wrought Iron bridge deck plates discourage corrosion — permit shallow floor depth design

The Maine Central realizes a number of advantages using ballast bridges with 4-D Wrought Iron deck plates. On their recently completed Mill Street Overpass, this type of construction permitted reduction of floor depth to a minimum.

4-D Wrought Iron's unique composition — glasslike iron silicate fibers entrained in a pure base metal — makes it extremely corrosion-resistant. It can withstand considerable fatigue stresses. Moreover, its self-fluxing properties enable welders to produce sound welds with ease.

In applications like this, where plates are subject to vibration and severe corrosive attack from coal and refrigerator car drippings and run-off water, 4-D Wrought Iron is more than equal to the occasion. The use of this metal is all the more important because regular maintenance is so difficult in ballast construction.

These advantages account for the increasing trend to 4-D Wrought Iron deck plates in ballast bridges used in highway grade crossing eliminations.

4-D Wrought Iron serves successfully in a number of other railway applications. *Wrought Iron for Railroads* tells which ones and why. Write for a copy. A. M. Byers Company, Clark Building, Pittsburgh 22, Pennsylvania.

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**Corrosion costs you more than Wrought Iron**